DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES APPROPRIATIONS FOR 1987

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES

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PART 9

DEPARTMENT OF COMMERCE

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DEPARTMENT OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY AND RELATED AGENCIES APPROPRIATIONS FOR 1987

TUESDAY, MARCH 18, 1986.

U.S. DEPARTMENT OF COMMERCE

WITNESSES

MALCOLM BALDRIGE, SECRETARY OF COMMERCE
CLARENCE J. BROWN, DEPUTY SECRETARY
KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION
PAUL A. VANDER MYDE, ASSISTANT SECRETARY FOR CONGRESSIONAL AND INTERGOVERNMENTAL AFFAIRS
J. MICHAEL FARREN, DEPUTY UNDER SECRETARY FOR INTERNATIONAL TRADE
ANTHONY J. CALIO, ADMINISTRATOR, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION
MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. This morning we will start hearings on the Department of Commerce. Here to testify is the Honorable Malcolm Baldrige, Secretary of Commerce. The budget request for 1987 is $1,741,327,000. That is $318,692,747 reduction from the adjusted 1986 appropriations bill.

Gramm-Rudman sequestrations totalled $93,255,000 for this Department. In addition, the Committee has before it rescission proposals totalling $205,742,000 related to EDA, International Trade Administration, NOAA, and Public Telecommunications Facilities Planning and Construction Grant Program.

Mr. Secretary, do you have a statement at this time?

STATEMENT OF HON. MALCOLM BALDRIGE, SECRETARY OF COMMERCE

Mr. BALDRIGE. Thank you, Mr. Chairman.

The economy continues to enjoy vigorous expansion and bringing Federal spending under control will remove the last obstacle to a long-term future of growth and prosperity, and that's the Federal budget deficit. The Commerce budget of $1.7 billion is part of the President's plan to meet the $144 billion deficit target under Gramm-Rudman-Hollings and would avoid a second round of automatic cuts next fall.

For each of the past few years I've been pleased to highlight for you the improvements in the economy. The statistics are getting better. During the past three years, industrial production has been up by 25 percent; corporate profits, 117 percent; stock market has doubled, almost; employment has grown by 9.5 million in three years, and the unemployment rate has fallen by 3.1 percent.

Real GNP grew at a 4.5 percent annual rate during the past three years, compared with only 2.2 during the last three years of the previous Administration.

The prime rate and other key interest rates are less than half their 1981 levels.

We can assure continued economic growth by adopting the President's goals set in the 1987 budget and legislative program. They meet the Gramm-Rudman-Hollings deficit target of $144 billion; they require no new taxes; and they preserve Social Security and essential domestic spending and provide 3 percent real growth for national security, as agreed by the President and Congress last year.

Before turning to the specifics of the Commerce budget, I'd like to cover two more areas in which legislation is needed to ensure continued economic growth in addition to eliminating the deficit.

ANTITRUST REFORM

Antitrust reform is one. More than a year ago, Mr. Chairman, I focused on the outdated nature of our antitrust laws. I was particularly concerned with the antitrust laws that govern mergers, and particularly, horizontal mergers that can be pro-competitive. These laws need to be revised to reflect an increasingly global market, and I am pleased that the Economic and Domestic Policy Councils have completed an extensive review and the Administration and the President have approved their recommendations and sent to Congress an antitrust reform package—five bills to make the antitrust laws compatible with today's world in which American businesses must compete and survive. They have now been introduced in both the House and the Senate.

They hold out real promise for strengthening American firms. At the same time, the bills maintain and strengthen the antitrust laws' protection of competition and of the consumer. We have never claimed that antitrust reform would solve all our trade problems, but they will create new opportunities for distressed industries and encourage pro-competitive activity throughout our economy. They are part of the whole mosaic of competitiveness that we should not overlook.

PRODUCT LIABILITY

The other issue, Mr. Chairman, is product liability. Uncertainty and instability in our product liability system is an area of very major concern to business and consumers alike. I could say this is approaching almost a crisis in certain areas. This uncertainty is having a negative effect on United States productivity and competitiveness in that some businesses will refuse to produce socially-beneficial products. Others, mainly small businesses, are closing because of the high price they have to pay to insure themselves against product liability.

Reform of the product liability system is needed, and this Administration places a high priority on such reform. In his follow-on message to the State of the Union address, the President said that the Administration will continue to work toward a uniform standard of product liability that is fair to consumers and manufacturers alike. We intend to work with the Congress to bring that about.

1987 COMMERCE BUDGET

The 1987 Commerce budget is $400 million less than the 1986 appropriation. It is a positive budget, fitting the Administration and the Department's goals. We have eliminated or reduced programs that are beyond our core mission or that are marginally beneficial. At the same time, high priority programs needed to meet our core missions are adequately funded.

1986 RESCISSIONS

Rescissions—the first action that we must take is to end direct subsidies in the Commerce budget. We can save $197 million in 1986, $294 million in 1987 by rescinding funds for EDA, Trade Adjustment Assistance, Coastal Zone Management, Sea Grant, and Public Telecommunications Facility grants.

Over the last six years, I have asked you to terminate EDA and you have agreed to appropriations reductions over this period of 70 percent. The program serves no national purpose, and it is time now to eliminate the remaining $175 million. Our economy is a far more powerful generator of employment. The 9.5 million new jobs created in the last three years works out to 263,000 a month versus an estimated 1,700 a month from EDA projects. The projects now being undertaken serve only narrow local interests. Appropriate Federal assistance for local economic development will remain available through HUD's community development block grant program.

I am also concerned about the $65 million total in special projects that have been added to the EDA budget with increasing frequency during the past three years. These projects are substantially larger than regular projects and bypass EDA review procedures. They are not the type of projects contemplated by the Congress when it established EDA. This practice should be stopped, as well as eliminating the regular EDA program.

Likewise, Trade Adjustment Assistance has been reduced by 80 percent since 1981. We have spent $112 million on TAA since it was transferred to the International Trade Administration in 1982. Management of Trade Adjustment Assistance has been improved, but not program performance. Last year, the Inspector General found that only 5 percent of the firms entering the program survived. The Trade Adjustment Assistance raises false expectations that Government intervention can rectify competitive disadvantages. The authorizing legislation for this program expired December 19th; the last Trade Adjustment Assistance Centers are in the process of closing down. We can complete the job by rescinding the remaining 1985 and 1986 balances of $19.3 million and terminating this program in 1987.

In 1987 we propose to terminate or reduce several activities in Commerce that are better left to the private sector or other levels of government. Significant reductions included here are tourism promotion, productivity, technology and innovation activities, fire and building research, Landsat commercialization subsidies, and fisheries grant programs.

EFFECTS OF GRAMM-RUDMAN-HOLLINGS ACT

I supported the enactment of the Gramm-Rudman-Hollings Act. Commerce agencies will carry out the 1986 reductions which went into effect this month without closing facilities and without terminating programs or without furloughing employees. If necessary, we will submit reprogramming proposals. Depending on the amount required, we may not be able to make the same statement if another sequester order is necessary next October.

Your support is needed to adopt our proposed reductions so that we will not have to continue making reductions in effective programs along with the ineffective—in short, throwing out the baby with the bath water.

PROGRAM INCREASE

While we are proposing a net 19 percent reduction from the 1986 appropriation, the 1987 budget provides increases to meet requirements for priority programs for the nation. The Census request includes $71 million to continue preparation and testing for the 1990 census and the 1987 Economic and Agriculture Censuses. Program increases totalling $127 million are proposed throughout the Commerce budget to meet pressing concerns in trade administration, research to assist American industry, Patent Office automation, and weather technology and research. Additionally, the Small Business Administration will be transferred to Commerce following enactment of enabling legislation. A budget amendment will be proposed to transfer SBA to Commerce after the legislation is signed.

CENSUS

The remainder of my testimony highlights these changes.

Preparation for the 1990 census is well underway. In 1985, we conducted tests in New Jersey and Florida, and we'll follow up with tests in Los Angeles and Mississippi in 1986. A total of $78.9 million is needed to conduct further testing in 1987. Our goal is to conduct the 1990 census at the same per housing unit cost as in 1980, and our current estimate for that total cost is $1.8 billion. That's for the decennial census.

ITA

Within the ITA, International Trade Administration, two significant increases are proposed. A total of $2.2 million will carry out expanded requirements of the Export Administration Amendments Act of 1985. These funds will allow us to reduce commodity classifications processing time from 270 days to 10 days, and export license processing time for COCOM countries from 30 days to 15 days. Almost half the increase will support obtaining technical assistance from other Federal agencies to establish better export controls in such areas as computer systems, automated manufacturing, biotechnology, and semiconductors.

Increased funding of $2.4 million for import administration is needed to meet the growing workload. New antidumping/countervailing duty cases have increased from 40 in 1980 to 144 in 1985, and they involve increasingly complicated issues. In turn, there is a corresponding increase in the number of orders requiring an annual review. In 1980, 110 were in effect; today, 212—almost a 100 percent increase. This same program administers 16 voluntary restraint steel agreements under the President's 1984 steel program, double the amount in place at this time last year.

NBS

So ITA's programs are one set of tools which directly affect this Administration's attack on the trade deficit. At the National Bureau of Standards, new programs are proposed to assist American industry in meeting the competitive challenge. NBS's role is to provide sophisticated new measurement services to maintain quality control and process efficiency.

We are requesting $10 million, Mr. Chairman, to begin construction of a cold neutron research facility. The NBS reactor is the only one in the U.S. capable of accommodating large volume cold neutron research. Cold neutrons are useful in the study of polymers, ceramics, rapidly solidified metals, and other new materials—areas which are becoming increasingly important to the economy. Japan is spending $50 million to build a similar facility. We cannot afford any further delay in this process.

Two other increases we request for NBS in 1987 are $1 million for fiber-optics and $800,000 for the balance of the advanced ceramics program that was partially funded in 1986. Research on the characteristics of fiber-optic component behavior--including signal loss, scattering, and component behavior—is critical in order to expand the U.S. share of this rapidly-growing $1 billion world market. The increase in advanced ceramics will raise the program to the $3 million level to permit research on applications in electronics and engine parts industries.

PTO

The Patent and Trademark Office program level will increase by $16.3 million to a total of $243.4 million. While most of the increase will be used to support PTO automation, we continue to work toward the goal of reducing the time it takes to process a patent application. We are committed to achieve 18 months' pendency at the earliest possible time. We have made considerable progress. Today it's about 21 months. It would have been 36 months by now if we had not begun our pendency reduction program in 1981.

NOAA

Within the request for NOAA, significant funding is provided to move ahead with modernization of the National Weather Service. A total of $47 million is requested to be transferred from the FAA

Airport and Airway Trust Fund to begin production of the Next Generation Weather Radar, NEXRAD. By 1993, 113 radars will be installed nationwide in the continental United States. The new radars will increase warning times for tornadoes to as much as 20 minutes from the current 2 minutes.

We are moving ahead with the procurement of five geostationary—GOES—satellites which you approved last year. The five satellite buy will ensure stable GOES coverage through the 1990's, and has allowed us to reduce GOES cost projections by $100 million from last year's estimates. Further, the instrumentation is upgraded for improved forecasting.

An increase of $3.8 million is also provided to establish within NOAA a Mission Control Center for satellite-assisted U.S. search and rescue operations.

FINANCIAL MANAGEMENT SYSTEM

One final program increase deserves your attention, Mr. Chairman. In the Office of the Secretary, $1.5 million is requested to develop a Commerce financial management system. In 1987, the funds will develop a model accounting system and provide equipment and communications for a demonstration at one regional Administrative Support Center. Improved financial management is a top priority for this Administration and, while always important, is even more critical in an era of tighter budgets. To do this, we need a system to provide us financial and other management information quickly and in a form that managers can use. Our eight existing accounting systems do not have that capability.

SMALL BUSINESS ADMINISTRATION

The Small Business Administration transfer—the Administration is proposing to transfer SBA and its remaining non-credit programs to Commerce in 1987 and terminate the credit programs, direct loans. The new Commerce agency will be headed by an Under Secretary for Small Business. We will continue the small business advocacy and research program, small business procurement and technical assistance program, the small business innovation and research program, the National Advisory Council, and the Service Corps of Retired Executives' Volunteer Management Counseling Program. SBA's Minority Small Business 8(A) program will be strengthened by merging it with the Department's Minority Business Development Agency.

Commerce serves all businesses, large and small. Small businesses will benefit from the transfer of SBA to Commerce. Our efforts in trade, data service, and research to assist American industry will result in improved coordination of SBA programs. SBA will be more visible in the Administration in the agency in charge of commercial policy, and its voice stronger in the Cabinet.

Our 1987 budget carries out the Government and departmental missions which are essential. It provides the funds where they are needed. It is part of a careful plan to avoid arbitrary cuts in effective programs in a second round under Gramm-Rudman-Hollings. We must work together to take the tough actions to eliminate unnecessary programs and ones we can no longer afford. This is the only way we can successfully reduce the Federal deficit and meet the President's goals, and failure to do so will certainly have far-reaching consequences for the economy and subject crucial Federal programs to unwarranted reductions.

Mr. Chairman, thank you very much for your patience. I'll be glad to take any questions you have.

[Statement of Mr. Baldrige follows:]

STATEMENT BY SECRETARY OF COMMERCE
MALCOLM BALDRIGE
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE
ON COMMERCE, JUSTICE, STATE, THE JUDICIARY AND
RELATED AGENCIES

MARCH 18, 1986

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE, THE ECONOMY CONTINUES TO ENJOY VIGOROUS EXPANSION. BRINGING FEDERAL SPENDING UNDER CONTROL WILL REMOVE THE LAST OBSTACLE TO A LONG TERM FUTURE OF GROWTH AND PROSPERITY -- THE FEDERAL BUDGET DEFICIT. THE COMMERCE BUDGET OF $1.7 BILLION IS PART OF THE PRESIDENT'S PLAN TO MEET THE $144 BILLION DEFICIT TARGET UNDER THE GRAMM-RUDMAN-HOLLINGS ACT AND AVOID A SECOND ROUND OF AUTOMATIC CUTS NEXT FALL.

ECONOMIC IMPROVEMENTS

FOR EACH OF THE PAST FEW YEARS I HAVE BEEN PLEASED TO HIGHLIGHT FOR YOU THE IMPROVEMENTS IN THE ECONOMY. THE STATISTICS ARE GETTING BETTER:

- DURING THE PAST THREE YEARS, INDUSTRIAL PRODUCTION HAS RISEN BY 25 PERCENT.

- During the same period, corporate profits increased 117 percent and the stock market has nearly doubled in value.

- Employment has grown by 9.5 million in three years, while the unemployment rate has fallen by 3.1 percentage points.

- Real GNP grew at a 4.5 percent annual rate during the past three years, compared with only a 2.2 percent annual rate during the last three years of the previous administration.

- The prime rate, and other key interest rates, are less than half their 1981 levels.

We can assure continued economic growth by adopting the President's goals set in the 1987 budget and legislative program. The President's program:

1) meets the Gramm-Rudman-Hollings deficit target of $144 billion by eliminating ineffective programs;

2) requires no new taxes;.

3) preserves Social Security and essential domestic spending; and

4) provides 3 percent real growth for national security as agreed by the President and Congress last year.

BEFORE TURNING TO THE SPECIFICS OF THE COMMERCE BUDGET, I WANT TO COVER TWO AREAS IN WHICH LEGISLATION IS NEEDED TO ENSURE CONTINUED ECONOMIC GROWTH IN ADDITION TO ELIMINATING THE DEFICIT.

ANTITRUST REFORM

MR. CHAIRMAN, MORE THAN A YEAR AGO I FOCUSED ON THE OUTDATED NATURE OF OUR ANTITRUST LAW. I WAS PARTICULARLY CONCERNED WITH THE ANTITRUST LAWS THAT GOVERN MERGERS. THESE LAWS NEED TO BE REVISED TO REFLECT AN INCREASINGLY GLOBAL MARKET. I AM PLEASED THAT THE ECONOMIC AND DOMESTIC POLICY COUNCILS HAVE COMPLETED AN EXTENSIVE REVIEW, AND THE PRESIDENT HAS APPROVED THEIR RECOMMENDATIONS. THE ADMINISTRATION HAS SENT TO THE CONGRESS AN ANTITRUST REFORM PACKAGE -- FIVE BILLS TO MAKE THE ANTITRUST LAWS COMPATIBLE WITH TODAY'S WORLD IN WHICH AMERICA'S BUSINESSES MUST COMPETE AND SURVIVE. THEY HAVE NOW BEEN INTRODUCED IN BOTH THE HOUSE AND SENATE.

THESE BILLS HOLD OUT REAL PROMISE FOR STRENGTHENING AMERICAN FIRMS. AT THE SAME TIME, THE BILLS MAINTAIN AND STRENGTHEN THE ANTITRUST LAWS' PROTECTION OF COMPETITION AND OF THE CONSUMER. WE, OF COURSE, HAVE NEVER CLAIMED THAT ANTITRUST REFORM WOULD SOLVE ALL OUR TRADE PROBLEMS. BUT THEY WILL CREATE NEW OPPORTUNITIES FOR DISTRESSED INDUSTRIES, AND ENCOURAGE PRO-COMPETITIVE ACTIVITY THROUGHOUT OUR ECONOMY. THEY ARE PART OF THE WHOLE MOSAIC OF COMPETITIVENESS THAT WE SHOULD NOT OVERLOOK.

PRODUCT LIABILITY

UNCERTAINTY AND INSTABILITY IN OUR PRODUCT LIABILITY SYSTEM IS AN AREA OF MAJOR CONCERN TO BUSINESS AND CONSUMERS ALIKE. THIS UNCERTAINTY IS HAVING A NEGATIVE EFFECT ON U.S. PRODUCTIVITY AND COMPETITIVENESS IN THAT SOME BUSINESSES WILL REFUSE TO PRODUCE SOCIALLY BENEFICIAL PRODUCTS. OTHERS, MAINLY SMALL BUSINESSES, ARE CLOSING BECAUSE OF THE HIGH PRICE THEY HAVE TO PAY TO INSURE THEMSELVES AGAINST PRODUCT LIABILITY.

REFORM OF THE PRODUCT LIABILITY SYSTEM IS NEEDED AND THIS ADMINISTRATION PLACES A HIGH PRIORITY ON SUCH REFORM. IN HIS FOLLOW-ON MESSAGE TO THE STATE OF THE UNION ADDRESS, THE PRESIDENT SAID THAT THE ADMINISTRATION WILL CONTINUE TO WORK TOWARD "A UNIFORM STANDARD OF PRODUCT LIABILITY THAT IS FAIR TO CONSUMERS AND MANUFACTURERS ALIKE." WE INTEND TO WORK WITH THE CONGRESS AND ALL INTERESTED PARTIES TOWARD BRINGING ABOUT MEANINGFUL REFORM.

1987 COMMERCE BUDGET

OUR 1987 BUDGET IS $400 MILLION LESS THAN THE 1986 APPROPRIATION. IT IS A POSITIVE BUDGET FITTING THE ADMINISTRATION'S AND DEPARTMENT'S GOALS. WE HAVE ELIMINATED OR REDUCED PROGRAMS THAT ARE BEYOND OUR CORE MISSIONS OR ARE MARGINALLY BENEFICIAL. AT THE

SAME TIME, HIGH PRIORITY PROGRAMS NEEDED TO MEET OUR CORE MISSIONS ARE ADEQUATELY FUNDED.

RESCISSIONS

THE FIRST ACTION THAT WE MUST TAKE IS TO END DIRECT SUBSIDIES IN THE COMMERCE BUDGET. WE CAN SAVE $197 MILLION IN 1986 AND $294 MILLION IN 1987 BY RESCINDING FUNDS FOR ECONOMIC DEVELOPMENT ASSISTANCE, TRADE ADJUSTMENT ASSISTANCE, COASTAL ZONE MANAGEMENT, SEA GRANT AND PUBLIC TELECOMMUNICATIONS FACILITIES GRANTS.

OVER THE LAST SIX YEARS, I HAVE ASKED YOU TO TERMINATE EDA AND YOU HAVE AGREED TO APPROPRIATIONS REDUCTIONS OVER THIS PERIOD OF 70 PERCENT. THE PROGRAM SERVES NO NATIONAL PURPOSE AND IT IS TIME NOW TO ELIMINATE THE REMAINING $175 MILLION. OUR ECONOMY IS A FAR MORE POWERFUL GENERATOR OF EMPLOYMENT. THE 9.5 MILLION NEW JOBS CREATED THE PAST THREE YEARS WORKS OUT TO 263 THOUSAND A MONTH VERSUS AN ESTIMATED 60 THOUSAND IN THREE YEARS OR 1,700 A MONTH FROM EDA PROJECTS. THE PROJECTS NOW BEING UNDERTAKEN SERVE ONLY NARROW LOCAL INTERESTS. APPROPRIATE FEDERAL ASSISTANCE FOR LOCAL ECONOMIC DEVELOPMENT WILL REMAIN AVAILABLE THROUGH HUD'S COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM.

I AM ALSO CONCERNED ABOUT THE $65 MILLION TOTAL IN SPECIAL PROJECTS THAT HAVE BEEN ADDED TO THE EDA BUDGET WITH INCREASING FREQUENCY DURING THE PAST THREE YEARS. THESE PROJECTS ARE SUBSTANTIALLY LARGER THAN REGULAR PROJECTS AND BYPASS EDA REVIEW

PROCEDURES. THEY ARE NOT THE TYPE OF PROJECTS CONTEMPLATED BY THE CONGRESS WHEN IT ESTABLISHED EDA. THIS PRACTICE SHOULD BE STOPPED AS WELL AS ELIMINATING THE REGULAR EDA PROGRAM.

LIKEWISE TRADE ADJUSTMENT ASSISTANCE (TAA) HAS BEEN REDUCED BY 80 PERCENT SINCE 1981. WE HAVE SPENT $112 MILLION ON THE TAA PROGRAM SINCE IT WAS TRANSFERRED TO ITA IN 1982. MANAGEMENT OF TAA HAS BEEN IMPROVED, BUT NOT PROGRAM PERFORMANCE. LAST YEAR THE INSPECTOR GENERAL FOUND THAT ONLY 5 PERCENT OF THE FIRMS ENTERING THE PROGRAM SURVIVE. TAA RAISES FALSE EXPECTATIONS THAT GOVERNMENT INTERVENTION CAN RECTIFY COMPETITIVE DISADVANTAGES. THE AUTHORIZING LEGISLATION FOR THIS PROGRAM EXPIRED DECEMBER 19, 1985. TRADE ADJUSTMENT ASSISTANCE CENTERS ARE IN THE PROCESS OF CLOSING DOWN. WE CAN COMPLETE THE JOB BY RESCINDING THE REMAINING 1985 AND 1986 BALANCES OF $19.3 MILLION AND TERMINATING THE PROGRAM IN 1987.

IN 1987 WE PROPOSE TO TERMINATE OR REDUCE SEVERAL ACTIVITIES IN COMMERCE THAT ARE BETTER LEFT TO THE PRIVATE SECTOR OR OTHER LEVELS OF GOVERNMENT. SIGNIFICANT REDUCTIONS INCLUDED HERE ARE TOURISM PROMOTION, PRODUCTIVITY, TECHNOLOGY AND INNOVATION ACTIVITIES, FIRE AND BUILDING RESEARCH, LANDSAT COMMERCIALIZATION SUBSIDIES AND FISHERIES GRANT PROGRAMS.

I SUPPORTED THE ENACTMENT OF THE GRAMM-RUDMAN-HOLLINGS ACT. COMMERCE AGENCIES WILL CARRY OUT THE 1986 REDUCTIONS WHICH WENT INTO EFFECT THIS MONTH WITHOUT CLOSING FACILITIES, TERMINATING

PROGRAMS OR FURLOUGHING EMPLOYEES. IF NECESSARY, WE WILL SUBMIT REPROGRAMMING PROPOSALS. DEPENDING ON THE AMOUNT REQUIRED, WE MAY NOT BE ABLE TO MAKE THE SAME STATEMENT IF ANOTHER SEQUESTER ORDER IS NECESSARY NEXT OCTOBER. YOUR SUPPORT IS NEEDED TO ADOPT OUR PROPOSED REDUCTIONS SO THAT WE WILL NOT HAVE TO CONTINUE MAKING REDUCTIONS IN EFFECTIVE PROGRAMS ALONG WITH THE INEFFECTIVE -- WHICH WOULD BE THE CLASSIC EXAMPLE OF THROWING OUT THE BABY WITH THE BATH WATER.

1987 INCREASES

WHILE WE ARE PROPOSING A NET 19 PERCENT REDUCTION FROM THE THE 1986 APPROPRIATION, THE 1987 BUDGET PROVIDES INCREASES TO MEET REQUIREMENTS FOR PRIORITY PROGRAMS FOR THE NATION. THE CENSUS REQUEST INCLUDES $71 MILLION TO CONTINUE PREPARATION AND TESTING FOR THE 1990 CENSUS AND THE 1987 ECONOMIC AND AGRICULTURE CENSUSES. PROGRAM INCREASES TOTALLING $127 MILLION ARE PROPOSED THROUGHOUT THE COMMERCE BUDGET TO MEET PRESSING CONCERNS IN TRADE ADMINISTRATION, RESEARCH TO ASSIST AMERICAN INDUSTRY, PATENT OFFICE AUTOMATION, AND WEATHER TECHNOLOGY AND RESEARCH. ADDITIONALLY, THE SMALL BUSINESS ADMINISTRATION (SBA) WILL BE TRANSFERRED TO COMMERCE FOLLOWING ENACTMENT OF ENABLING LEGISLATION. A BUDGET AMENDMENT WILL BE PROPOSED TO TRANSFER SBA TO COMMERCE AFTER THE LEGISLATION IS SIGNED. THE REMAINDER OF MY TESTIMONY HIGHLIGHTS THESE CHANGES.

Preparation for the 1990 Census is well underway. In 1985, we conducted tests in New Jersey and Florida, and will follow up with tests in Los Angeles and Mississippi in 1986. A total of $78.9 million is needed to conduct further testing in 1987. Our goal is to conduct the 1990 census at the same per housing unit cost as in 1980. Our current estimate for the total cost of the decennial is $1.8 billion.

Within the International Trade Administration (ITA), two significant increases are proposed. A total of $2.2 million will be used to carry out expanded requirements of the Export Administration Amendments Act of 1985. These funds will allow us to reduce commodity classifications processing time from 270 days to 10 days, and export license processing time for COCOM countries from 30 days to 15 days. Almost half of the increase will support obtaining technical assistance from other Federal agencies to establish better export controls in such areas as computer systems, automated manufacturing, biotechnology and semiconductors.

Increased funding of $2.4 million for import administration is needed to meet the growing workload. New antidumping/countervailing duty (AD/CVD) cases have increased from 40 in 1980 to 144 in 1985, and involve increasingly complex issues. In turn, there is a corresponding increase in the number of orders requiring annual review. In 1980, 110 were in effect, today 212 are in effect - a 93 percent increase. This same program

ADMINISTERS 16 VOLUNTARY RESTRAINT STEEL AGREEMENTS UNDER THE 1984 PRESIDENT'S STEEL PROGRAM, DOUBLE THE AMOUNT IN PLACE AT THIS TIME LAST YEAR.

ITA'S PROGRAMS ARE ONE SET OF TOOLS WHICH DIRECTLY AFFECT THIS ADMINISTRATION'S ATTACK ON THE TRADE DEFICIT. AT THE NATIONAL BUREAU OF STANDARDS (NBS), NEW PROGRAMS ARE PROPOSED TO ASSIST AMERICAN INDUSTRY IN MEETING THE COMPETITIVE CHALLENGE. NBS'S ROLE IS TO PROVIDE SOPHISTICATED NEW MEASUREMENT SERVICES TO MAINTAIN QUALITY CONTROL AND PROCESS EFFICIENCY.

WE ARE REQUESTING $10 MILLION TO BEGIN CONSTRUCTION OF A COLD NEUTRON RESEARCH FACILITY. THE NBS REACTOR IS THE ONLY ONE IN THE U.S. CAPABLE OF ACCOMMODATING LARGE VOLUME COLD NEUTRON RESEARCH. COLD NEUTRONS ARE USEFUL IN THE STUDY OF POLYMERS, CERAMICS, RAPIDLY SOLIDIFIED METALS AND OTHER NEW MATERIALS -- AREAS WHICH ARE BECOMING INCREASINGLY IMPORTANT TO THE ECONOMY. JAPAN IS SPENDING $50 MILLION TO BUILD A SIMILAR FACILITY. WE CANNOT AFFORD ANY FURTHER DELAY IN THIS PROGRAM.

TWO OTHER INCREASES WE REQUEST FOR NBS IN 1987 ARE $1 MILLION FOR FIBER-OPTICS AND $800 THOUSAND FOR THE BALANCE OF THE ADVANCED CERAMICS PROGRAM THAT WAS PARTIALLY FUNDED IN 1986. RESEARCH ON CHARACTERISTICS OF FIBER-OPTIC COMPONENT BEHAVIOR -- INCLUDING SIGNAL LOSS, SCATTERING AND COMPONENT BEHAVIOR -- IS CRITICAL IN ORDER TO EXPAND THE U.S. SHARE OF THIS RAPIDLY GROWING $1 BILLION WORLD MARKET. THE INCREASE IN ADVANCED CERAMICS WILL RAISE THE

PROGRAM TO THE $3.0 MILLION LEVEL TO PERMIT RESEARCH ON APPLICATIONS IN ELECTRONICS AND ENGINE PARTS INDUSTRIES.

THE PATENT AND TRADEMARK OFFICE (PTO) PROGRAM LEVEL WILL INCREASE BY $16.3 MILLION TO A TOTAL OF $243.4 MILLION. WHILE MOST OF THE INCREASE WILL BE USED TO SUPPORT PTO AUTOMATION, WE CONTINUE TO WORK TOWARD THE GOAL OF REDUCING THE TIME IT TAKES TO PROCESS A PATENT APPLICATION. WE ARE COMMITTED TO ACHIEVE 18 MONTH PENDENCY AT THE EARLIEST POSSIBLE TIME. WE HAVE MADE CONSIDERABLE PROGRESS. TODAY PATENT APPLICATION PENDENCY IS 21 MONTHS. IT WOULD HAVE BEEN 36 MONTHS BY NOW IF WE HAD NOT BEGUN OUR PENDENCY REDUCTION PROGRAM IN 1981.

WITHIN THE REQUEST FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA), SIGNIFICANT FUNDING IS PROVIDED TO MOVE AHEAD WITH MODERNIZATION OF THE NATIONAL WEATHER SERVICE. A TOTAL OF $47 MILLION IS REQUESTED TO BE TRANSFERRED FROM THE FAA AIRPORT AND AIRWAY TRUST FUND TO BEGIN PROCUREMENT OF THE NEXT GENERATION WEATHER RADAR (NEXRAD). BY 1993, 113 RADARS WILL BE INSTALLED NATIONWIDE IN THE CONTINENTAL UNITED STATES. THE NEW RADARS WILL INCREASE WARNING TIMES FOR TORNADOES TO AS MUCH AS 20 MINUTES FROM THE CURRENT 2 MINUTES. WE ARE MOVING AHEAD WITH THE PROCUREMENT OF FIVE GEOSTATIONARY (GOES) SATELLITES WHICH YOU APPROVED LAST YEAR. THE FIVE SATELLITE BUY WILL ASSURE STABLE GOES COVERAGE THROUGH THE 1990'S, AND HAS ALLOWED US TO REDUCE GOES COST PROJECTIONS BY $100 MILLION FROM LAST YEAR'S ESTIMATES. FURTHER, THE INSTRUMENTATION IS UPGRADED FOR IMPROVED FORECASTING. AN INCREASE OF

$3.8 MILLION ALSO IS PROVIDED TO ESTABLISH WITHIN NOAA A MISSION CONTROL CENTER FOR SATELLITE-ASSISTED U.S. SEARCH AND RESCUE OPERATIONS.

ONE FINAL PROGRAM INCREASE DESERVES YOUR ATTENTION. IN THE OFFICE OF THE SECRETARY, $1.5 MILLION IS REQUESTED TO DEVELOP A COMMERCE FINANCIAL MANAGEMENT SYSTEM. IN 1987, THE FUNDS WILL DEVELOP A MODEL ACCOUNTING SYSTEM AND PROVIDE EQUIPMENT AND COMMUNICATIONS FOR A DEMONSTRATION AT ONE REGIONAL ADMINISTRATIVE SUPPORT CENTER. IMPROVED FINANCIAL MANAGEMENT IS A TOP PRIORITY FOR THIS ADMINISTRATION AND WHILE ALWAYS IMPORTANT, IS EVEN MORE CRITICAL IN AN ERA OF TIGHTER BUDGETS. TO DO THIS, WE NEED A SYSTEM WHICH WILL PROVIDE US FINANCIAL AND OTHER MANAGEMENT INFORMATION QUICKLY AND IN A FORM THAT MANAGERS CAN USE. OUR EIGHT EXISTING ACCOUNTING SYSTEMS DO NOT HAVE THAT CAPABILITY.

SMALL BUSINESS ADMINISTRATION TRANSFER

THE ADMINISTRATION IS PROPOSING TO TERMINATE SBA CREDIT PROGRAMS AND TO TRANSFER SBA AND ITS REMAINING NON-CREDIT PROGRAMS TO COMMERCE IN 1987. THE NEW COMMERCE AGENCY WILL BE HEADED BY AN UNDER SECRETARY FOR SMALL BUSINESS. WE WILL CONTINUE THE SMALL BUSINESS ADVOCACY AND RESEARCH PROGRAM, PROCUREMENT AND TECHNICAL ASSISTANCE PROGRAMS, SMALL BUSINESS INNOVATION AND RESEARCH PROGRAM, NATIONAL ADVISORY COUNCIL, AND THE SERVICE CORPS OF RETIRED EXECUTIVE'S (SCORE) VOLUNTEER MANAGEMENT COUNSELING

PROGRAM. SBA'S MINORITY SMALL BUSINESS 8(A) PROGRAM WILL BE STRENGTHENED BY MERGING IT INTO THE DEPARTMENT'S MINORITY BUSINESS DEVELOPMENT AGENCY.

COMMERCE SERVES ALL BUSINESSES, LARGE AND SMALL. SMALL BUSINESS WILL BENEFIT FROM THE TRANSFER OF SBA TO COMMERCE. OUR EFFORTS IN TRADE, DATA SERVICES AND RESEARCH TO ASSIST AMERICAN INDUSTRY WILL RESULT IN IMPROVED COORDINATION OF SBA PROGRAMS. SBA WILL BE MORE VISIBLE IN THE ADMINISTRATION IN THE AGENCY IN CHARGE OF COMMERCIAL POLICY, AND ITS VOICE STRONGER IN THE CABINET.

OUR 1987 BUDGET CARRIES OUT THE GOVERNMENT AND DEPARTMENTAL MISSIONS WHICH ARE ESSENTIAL. IT PROVIDES THE FUNDS WHERE THEY ARE NEEDED. IT IS PART OF A CAREFUL PLAN TO AVOID ARBITRARY CUTS IN EFFECTIVE PROGRAMS IN A SECOND ROUND UNDER GRAMM-RUDMAN-HOLLINGS. WE MUST WORK TOGETHER TO TAKE THE TOUGH ACTIONS TO ELIMINATE UNNECESSARY PROGRAMS AND ONES WE CAN NO LONGER AFFORD. THIS IS THE ONLY WAY WE CAN SUCCESSFULLY REDUCE THE FEDERAL DEFICIT AND MEET THE PRESIDENT'S GOALS. FAILURE TO DO SO WILL HAVE FAR REACHING CONSEQUENCES FOR THE ECONOMY AND SUBJECT CRUCIAL FEDERAL PROGRAMS TO UNWARRANTED REDUCTIONS.

The Commerce Budget

IN BRIEF

FISCAL YEAR 1987

U.S. DEPARTMENT OF COMMERCE
Office of Budget

THE
COMMERCE
BUDGET
IN BRIEF

FISCAL YEAR 1987

U.S. Department of Commerce

Malcolm Baldrige, Secretary

Clarence J. Brown, Deputy Secretary

Kay Bulow Assistant Secretary for Administration	David S. Nathan Director, Planning Budget and Evaluation	Mark E. Brown Acting Director Office of Budget

FOREWORD

The purpose of THE COMMERCE BUDGET IN BRIEF is to assist the Congress and Administration officials who testify in support of the Commerce budget by highlighting the budget request for FY 1987 and the changes from FY 1986. The major portion of the document furnishes information on direct appropriation accounts for which there is a budget request for FY 1987, or for which an appropriation was enacted in FY 1986.

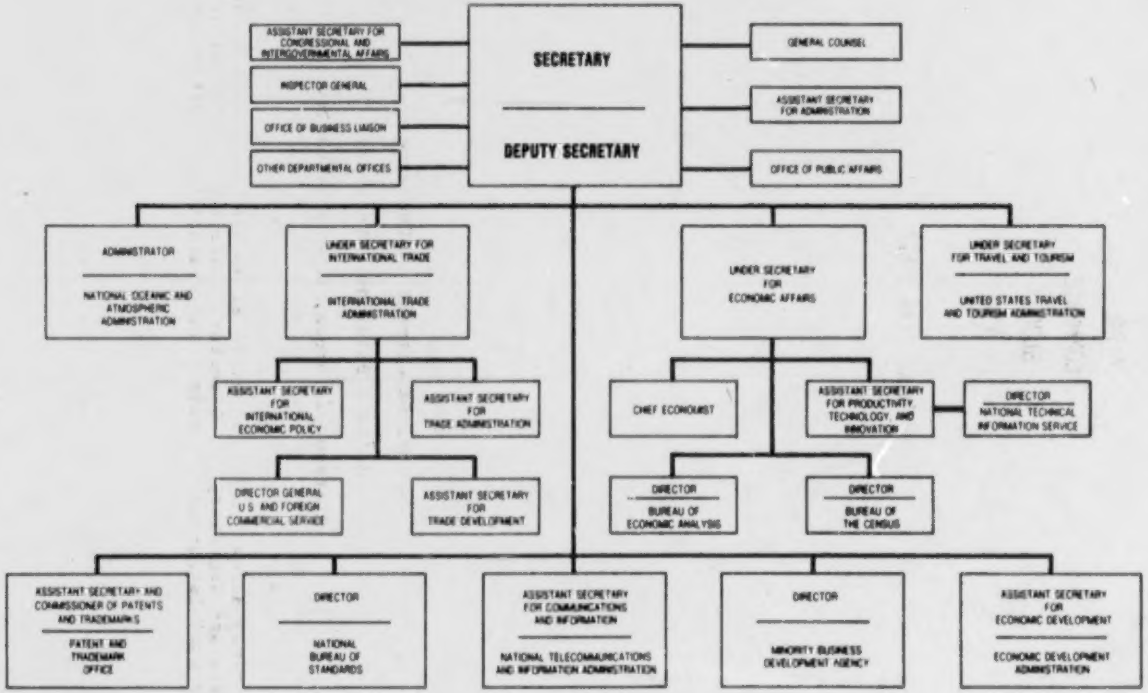
The document presents for the Department, and for each program area, tables comparing permanent positions and amounts appropriated for FY 1986 and the estimate for FY 1987. For each appropriation account, data are presented on permanent positions and amounts by activities; for each activity, FY 1987 program changes from FY 1987 base requirements are briefly identified and explained. For purposes of easily tracking changes from 1986 to 1987 in the bureau description material, the 1986 appropriation is used as the base. The bureau description section starts on page 8. The effects of the Balanced Budget and Emergency Deficit Control Act on FY 1986 appropriations enacted to date are also separately identified. Once the President's sequestration order issued under the Act becomes effective on March 1, the 1986 amounts sequestered are no longer available for obligation.

The tables for each appropriation contain information substantially the same as the "Summary of Requirements" (salmon sheet) in the budget justification material submitted to the Appropriations Committees. Page references are made to the budget justifications.

The document includes information on budget authority, outlays and employment. This information will be useful to the general public in understanding the total program of the Department. The document also provides information on the Department's mission and objectives, FY 1987 budget requests requiring authorizing legislation, proposed rescissions and deferrals of FY 1986 appropriations, and amounts sequestered in FY 1986 under the Balanced Budget and Emergency Deficit Control Act.

February 1986

U.S. DEPARTMENT OF COMMERCE


ASSISTANT SECRETARY FOR CONGRESSIONAL AND INTERGOVERNMENTAL AFFAIRS
INSPECTOR GENERAL
OFFICE OF BUSINESS LIAISON
OTHER DEPARTMENTAL OFFICES
SECRETARY
DEPUTY SECRETARY
GENERAL COUNSEL
ASSISTANT SECRETARY FOR ADMINISTRATION
OFFICE OF PUBLIC AFFAIRS
ADMINISTRATOR
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNDER SECRETARY FOR INTERNATIONAL TRADE
INTERNATIONAL TRADE ADMINISTRATION
UNDER SECRETARY FOR ECONOMIC AFFAIRS
UNDER SECRETARY FOR TRAVEL AND TOURISM
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION
ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
ASSISTANT SECRETARY FOR TRADE ADMINISTRATION
CHIEF ECONOMIST
ASSISTANT SECRETARY FOR PRODUCTIVITY, TECHNOLOGY, AND INNOVATION
DIRECTOR
NATIONAL TECHNICAL INFORMATION SERVICE
DIRECTOR GENERAL U.S. AND FOREIGN COMMERCIAL SERVICE
ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
DIRECTOR
BUREAU OF ECONOMIC ANALYSIS
DIRECTOR
BUREAU OF THE CENSUS
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
PATENT AND TRADEMARK OFFICE
DIRECTOR
NATIONAL BUREAU OF STANDARDS
ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
DIRECTOR
MINORITY BUSINESS DEVELOPMENT AGENCY
ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
ECONOMIC DEVELOPMENT ADMINISTRATION

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INTRODUCTION

Origin

The Department of Commerce was designated as such by the Act of March 4, 1913 (37 Stat. 7365; 15 U.S.C. 1501), which reorganized the Department of Commerce and Labor established by the Act of February 14, 1903 (32 Stat. 825; 15 U.S.C. 1501) by transferring the labor activities into a separate department.

Mission and Goals

The mission of the Department is "to foster, promote and develop the foreign and domestic commerce...of the United States." During President Reagan's first term, the Department's officials developed a series of goals and objectives for carrying out the mission in accord with this Administration's policies. The original goals have been modified to reflect four years' experience and are guiding resource and management decisions during the second term. A long range planning process was initiated in FY 1986 to assist in carrying out these goals:

- Increase America's competitiveness in the world economy.
- Safeguard the National interest through effective administration of U.S. trade laws.
- Stimulate productivity and economic development.
- Improve the quality, scope, timeliness and availability of Departmental statistics and analyses.
- Manage effectively the Nation's oceanic and atmospheric resources.
- Improve service delivery and internal management.

The 1987 budget for the Department of Commerce reflects the President's determination to curb domestic spending and to achieve the budget deficit targets required in the Balanced Budget and Emergency Deficit Control Act. Adopting this budget along with the remainder of the President's requests will meet the FY 1987 deficit target set in the Act.

We propose to eliminate or curtail programs whose mission has been achieved, programs that are better left to the private sector or state or local governments, programs that have proven ineffective, and programs that are low priority given fiscal realities. These actions will produce a net reduction of $442.2 million in 1987. In order to begin immediately to lower spending in these areas, rescissions of $196.6 million are proposed for 1986. The following programs would be substantially curtailed or eliminated under the budget request:

- Productivity, technology and innovation activities of the Under Secretary for Economic Affairs;
- Economic development assistance programs;
- Trade adjustment assistance for firms;
- Travel and tourism promotion;
- Landsat subsidies;
- Sea grant;
- Coastal zone management state grants;
- Fishery resource programs;
- Two polar-orbiting satellite system;
- Fire and building research;
- Computer sciences and technology; and
- Public telecommunications facilities grants.

Within the 1987 budget request, there are program changes and increases of $127 million that can be grouped under the Department's major goals:

Effectively Administer U.S. Trade Laws

- The 1987 budget contains resources for the International Trade Administration (ITA) to meet the new or expanded statutory requirements resulting from the Export Administration Amendments Act of 1985.
- ITA also will devote additional staff to investigating anti-dumping and countervailing duty petitions and conducting reviews of existing orders and voluntary restraint steel agreements with other countries.

Stimulate Productivity and Economic Development

- The 1987 budget requests funds to begin construction of a Cold Neutron Research Facility at the National Bureau of Standards. The facility will house three guide tubes and fifteen work stations useful in the study of polymers, ceramics, rapidly solidified metals, and new materials.

- In response to industry demands for increased measurements and related services, the Department proposes additional research on production and performance characteristics of advanced ceramics and an investigation into the scientific barriers to commercialization of fiber-optics. If the U.S. is to maintain or expand its share of these and other world markets, a greater understanding is needed of basic production and performance characteristics.

- The Administration proposes to transfer the Small Business Administration (SBA) and many of its non-credit programs to the Department of Commerce. SBA's Small Business Advocacy and Research program, Procurement and Technical Assistance program, Small Business Innovation and Research program, National Advisory Council, Service Corps of Retired Executives (SCORE) program and Administrative personnel will become part of a new Commerce Small Business Administration. SBA's Minority Small Business 8(a) procurement assistance program will be merged into the Minority Business Development Agency. The transfers would be effective October 1, 1986.

Improve Departmental Statistics and Analyses

- The Department will continue long-range planning for the 1990 Census of Population and Housing. Key events in 1987 include evaluating the results of the 1986 pretest and further testing of techniques for address list compilation, data collection and processing, and questionnaire design. The 1987 budget also proposes to improve data collection for two crucial areas of the economy--the service sector and foreign trade.

Manage Effectively Oceanic and Atmospheric Resources

- In FY 1987, the Weather Service's next generation radar program (NEXRAD) funds will be used to complete in-depth site surveys, begin preparation of NOAA facilities for the production radars, and start full-scale production with the selected contractor. Funds are included to continue the design and implementation of the Advanced Weather Interactive Processing System (AWIPS) and Automated Surface Observation System (ASOS) programs.

- Additional funds are included to augment hurricane prediction research by refining and implementing a second generation operational hurricane prediction system by 1992, to undertake a joint program with the Defense Department to improve instrumentation on hurricane and storm tracking aircraft, and to accelerate research to develop a thermodynamic profiler.

- The 1987 budget continues full support for a two-geostationary one-polar orbiting weather satellite system with sensor and ground system improvements. The single polar system should satisfy the U.S. contribution to the U.S.-Soviet search and rescue (SAR) program through 1990. An increase is proposed to establish within NOAA a Mission Control Center for U.S.-SAR operations.

- Funds are included to maintain support for implementation of the U.S./Canada Pacific Salmon Treaty.

Improve Service Delivery and Internal Management

- In accordance with the policy direction of OMB Circular No. A-127, development funds for a Department-wide financial management system are included in the 1987 budget request. Systems development activities will include procurement of computer equipment, utility and application software, and related telecommunications capabilities.

- The 1987 budget again proposes a new organization under the General Administration account, the Office of Grants and Loans Administration. This organization will be responsible for project monitoring and close-out activities and associated with the termination of economic development assistance, trade adjustment assistance, public telecommunications facilities grants, and NOAA fisheries financial assistance.

Balanced Budget and Emergency Deficit Control Act

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177) requires that $11.7 billion of current spending be sequestered in FY 1986 since the deficit is projected to exceed the limitation set in the Act for this year. The reductions to domestic programs necessary to meet their $5.9 billion share is 4.3 percent under the guidelines specified in the Act. The reduction in Commerce programs is $101.9 million. The reductions are taken in each appropriation account by program, project and activity as defined by Congress in P.L. 99-190 and accompanying reports. Total amounts to be sequestered in FY 1986 for each account are shown on page 45 of the Commerce Budget-in-Brief. The President's budget request for FY 1987 proposes sufficient reductions to meet the FY 1987 deficit target of $144 billion specified in the Act. Consequently, adopting the Commerce budget as proposed along with the rest of the President's request will eliminate the need for the sequestering in 1987 and a larger sequestration in 1988.

COMPARISON OF 1985, 1986, AND 1987 BUDGET AUTHORITY
(Dollar amounts in thousands)

	1985	1986 Enacted	1987 President's Budget 1986 1/	1987 President's Budget 1987	Change 1986 to 1987
General Administration	$36,983	$32,300	$30,911	$39,250	+$8,339
[Economic Development Administration]	259,110	209,500	139,182	...	-139,182
Bureau of the Census	166,259	196,000	187,572	277,230	+89,658
Economic and Statistical Analysis	30,652	30,500	29,188	31,005	+1,817
International Trade Administration	189,635	192,000	173,564	179,170	+5,606
Minority Business Development Agency	49,580	45,000	43,065	45,369	+2,304
United States Travel and Tourism Administration	11,532	12,000	11,484	4,023	-7,461
National Oceanic and Atmospheric Administration	1,299,400	1,188,656	1,074,618	886,279	-188,339
Patent and Trademark Office	100,159	84,700	81,058	109,632	+28,574
National Bureau of Standards	123,485	123,985	118,654	123,953	+5,299
National Telecommunications and Information Administration	37,479	37,400	13,972	13,916	-56
Subtotal, Federal Funds	2,304,274	2,152,041	1,903,268	1,709,827	-193,441
Trust Funds	58,360	63,209	62,005	114,339	+52,334
Offsetting Receipts	-53,649	-81,176	-95,576	-91,778	+3,798
Subtotal, Department of Commerce	2,308,985	2,134,074	1,869,697	1,732,388	-137,309
Proposed for later transmittal:					
Transfer from Small Business Administration to MBDA	...	...	...	11,406	+11,406
Transfer of Small Business Administration to Department of Commerce	...	...	...	27,210	+27,210
Fishermen's Guaranty Fund	...	...	...	-1,800	-1,800
Total, Department of Commerce	2,308,985	2,134,074	1,869,697	1,769,204	-100,493

1/ Includes supplementals, rescissions and balanced budget reductions. The President's sequestration order issued pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985 will reduce 1986 appropriations and other obligational authority by $101,919,000.

COMPARISON OF 1985, 1986, AND 1987 OUTLAYS

(Dollar amounts in thousands)

	1985	1986 1/	1987	Change 1986 to 1987
General Administration	$33,368	$35,889	$38,849	+$2,960
[Economic Development Administration]	351,487	225,302	189,843	-35,459
Bureau of the Census	176,120	180,728	245,627	+64,899
Economic and Statistical Analysis	36,292	28,431	30,814	+2,383
Regional Development Program	9,932	2,400	598	-1,802
International Trade Administration	183,359	161,232	176,005	+14,773
Minority Business Development Agency	54,313	51,208	43,576	-7,632
United States Travel and Tourism Administration	10,938	13,487	7,638	-5,849
National Oceanic and Atmospheric Administration	1,018,658	1,083,056	1,049,344	-33,712
Patent and Trademark Office	96,191	98,640	102,441	+3,801
National Bureau of Standards	129,582	121,469	123,615	+2,146
National Telecommunications and Information Administration	32,407	34,253	13,928	-20,325
Subtotal, Federal Funds	2,132,647	2,036,095	2,022,278	-13,817
Trust Funds	60,736	61,101	114,146	+53,045
Offsetting Receipts	-53,649	-95,576	-91,778	+3,798
Subtotal, Department of Commerce	2,139,734	2,001,620	2,044,646	+43,026
Proposed for later transmittal:				
Transfer from Small Business Administration to MBDA	...	...	11,064	+11,064
Transfer of Small Business Administration to Department of Commerce	...	...	26,394	+26,394
Fishermen's Guaranty Fund	...	...	-1,800	-1,800
Fishing Vessel and Gear Damage Compensation Fund	...	...	-3,000	-3,000
Total, Department of Commerce	2,139,734	2,001,620	2,077,304	+75,684

1/ Includes supplementals, rescissions and balanced budget reductions. The President's sequestration order issued pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985 will reduce 1986 appropriations and other obligational authority by $101,919,000.

COMPARISON OF 1985, 1986, AND 1987 TOTAL FULL-TIME EQUIVALENTS (WORKYEARS) FINANCED FROM ALL SOURCES OF FUNDS

	1985	1986 Enacted	1987	Change 1986 to 1987
General Administration	1,310	1,362	1,380	+18
[Economic Development Administration]	458	400	294	-106
Bureau of the Census	6,933	8,347	9,080	+733
Economic and Statistical Analysis	935	1,054	1,010	-44
International Trade Administration	2,817	2,899	2,968	+69
Minority Business Development Agency	226	242	250	+8
United States Travel and Tourism Administration	73	80	29	-51
National Oceanic and Atmospheric Administration	13,506	13,217	11,561	-1,656
Patent and Trademark Office	3,150	3,414	3,378	-36
National Bureau of Standards	3,093	3,140	2,997	-143
National Telecommunications and Information Administration	289	297	279	-18
Subtotal, Department of Commerce	32,790	34,452	33,226	-1,226
Proposed for later transmittal:				
Minority Business Development Agency	...	...	255	+255
Small Business Administration	...	...	340	+340
Total, Department of Commerce	32,790	34,452	33,821	-631

COMPARISON OF 1985, 1986 AND 1987 EMPLOYMENT IN PERMANENT POSITIONS (AS OF SEPTEMBER 30) FINANCED FROM ALL SOURCES OF FUNDS

	1985	1986 Enacted	1987	Change 1986 to 1987
General Administration	1,320	1,353	1,371	+18
[Economic Development Administration]	434	400	250	-150
Bureau of the Census	5,089	5,251	6,385	+1,134
Economic and Statistical Analysis	1,054	1,054	998	-56
International Trade Administration	2,773	2,905	2,933	+28
Minority Business Development Agency	229	233	233	...
United States Travel and Tourism Administration	78	80	29	-51
National Oceanic and Atmospheric Administration	12,754	12,462	10,753	-1,709
Patent and Trademark Office	3,438	3,408	3,401	-7
National Bureau of Standards	2,958	2,981	2,838	-143
National Telecommunications and Information Administration	281	283	268	-15
Subtotal, Department of Commerce	30,408	30,410	29,459	-951
Proposed for later transmittal:				
Minority Business Development Agency	...	...	283	+283
Small Business Administration	...	...	314	+314
Total, Department of Commerce	30,408	30,410	30,056	-354

GENERAL ADMINISTRATION

General Administration provides salaries and expenses for the Secretary, Deputy Secretary and staff of the Office of the Secretary and is the central management and administrative control point for budgetary and policy functions affecting Department goals and objectives. The Office of the Secretary is also the primary liaison to the Office of Management and Budget and responds to Executive Branch and Congressional inquiries.

General Administration also contains the Office of the Inspector General which conducts audits, investigations and inspections to combat waste, fraud and abuse of Departmental resources.

(Dollar amounts in thousands)

Summary of Appropriations:

Appropriation title	1985 Perm. Pos.	1985 Amount	1986 Appropriation Perm. Pos.	1986 Appropriation Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Salaries and expenses	603	$36,483	578	$32,300	579	$39,250	+1	+$6,950
Special foreign currency program	...	500	...	...	...	...	...	...
Total	603	36,983	578	32,300	579	39,250	+1	+6,950

SALARIES AND EXPENSES

Comparison by activity:	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Executive direction of the Department	40	$2,208	40	$2,581	40	$2,581	...	...
Departmental staff services	335	18,316	336	21,271	336	22,771	...	+$1,500
Inspector General	203	11,776	203	13,598	203	13,898	...	+300
Total requirements	578	32,300	579	37,450	579	39,250	...	+1,800

Highlights of program changes:	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Departmental staff services	336	$21,271	...	+$1,500
Develop Departmental Financial Management System in accordance with the policy direction of OMB Circular No. A-127. Provide funding for the development of a model accounting system and establishment of model equipment and communications system at one Regional Administrative Support Center.				
Inspector General	203	$13,598	...	+$300
Provide contract funds for technical assistance in complex ADP audits and expand preaward audits of major ADP procurements.				

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			578	$32,300
Adjustments to base and built-in changes:				
Financing from prior year appropriation			...	+4,692
Transfer from EDA, "Salaries and expenses"			+1	+60
Other increases:				
Restoration of 1986 pay reduction	...	+$184		
Rent payment to GSA	...	+971		
Federal Telecommunication System	...	+16		
Postal rates	...	+21		
Printing and reproduction	...	+33		
WCF charges	...	+373		
Supplies and materials	...	+6		
Equipment	...	+21		
Subtotal, other increases			...	+1,625
Other decreases:				
Management savings	...	-62		
Payment to Department of Labor for Employees' Compensation Fund	...	-169		
Productivity reviews	...	-4		
Non-recurring program costs	...	-992		
Subtotal, other decreases			...	-1,227
Total, adjustments to base and built-in changes			+1	+5,150
1987 base			579	37,450
Program changes			...	+1,800
Total requirements (1987 estimate)			579	39,250

[ECONOMIC DEVELOPMENT ADMINISTRATION]

The objectives of the Economic Development Administration (EDA) are to reduce substantial and persistent unemployment in economically distressed areas and to deal with problems of economic adjustment. The Administration proposes to terminate EDA programs in FY 1987 and to stimulate economic expansion and job creation in distressed areas through general tax, fiscal and regulatory reduction measures.

In FY 1987, EDA and other grants and loans programs proposed by the Administration for termination will be merged in the Office of Grants and Loans Administration to facilitate closeout of these programs.

(Dollar amounts in thousands)

Summary of Appropriations:

Appropriation title	1985 Perm. Pos.	1985 Amount	1986 Appropriation Perm. Pos.	1986 Appropriation Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Grants and loans administration........	434	$28,380	400	$26,000	250	$21,591*	-150	-$4,409
Economic development assistance programs..............................	...	230,730	...	183,500	...	...	...	-183,500
Total................................	434	259,110	400	209,500	250	21,591*	-150	-187,909

GRANTS AND LOANS ADMINISTRATION

Comparison by activity:

	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Economic development assistance programs..............................	400	$26,000	399	$26,270	250	$21,591*	-149	-$4,679

Highlights of program changes:

	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Grants and loans administration (EDA-5)......................................	399	$26,270	-149	-$4,679

Economic development programs will be discontinued. The remaining administrative resources plus Trade Adjustment Assistance, Public Telecommunications Facilities Program and NOAA Fisheries Financial Assistance administrative resources will be transferred to the Office of Grants and Loans Administration in the Office of the Secretary to monitor and close out existing grant and loan programs.

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*Funded through a reappropriation of unobligated 1986 funds to be transferred from "Economic development assistance programs." A total of $40 million will be reappropriated to support close-out costs for FY 1987-FY 1991.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			400	$26,000
Adjustments to base and built-in changes:				
Transfer to "Salaries and expenses," General Administration			-1	-60
Other increases:				
Rent payments to GSA	...	+$171		
Federal Telecommunications System	...	+21		
Other telecommunications services	...	+7		
Printing and reproduction	...	+3		
Payment to Department of Labor for Employees' Compensation Fund	...	+21		
Working Capital Fund	...	+106		
Supplies and materials	...	+1		
Subtotal, other increases			...	+330
Total, adjustments to base and built-in changes			-1	+270
1987 base			399	26,270
Program changes			-149	-4,679
Total requirements (1987 estimate)			250	21,591
Financing from prior year unobligated balances			...	-21,591
Appropriation			250	...

ECONOMIC DEVELOPMENT ASSISTANCE PROGRAMS

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Planning grants:								
Districts	...	$16,000	...	$11,800	...	...	...	-$11,800
States	...	3,000	...	2,200	...	...	...	-2,200
Indians	...	3,000	...	2,200	...	...	...	-2,200
Urban	...	5,000	...	3,800	...	...	...	-3,800
Subtotal	...	27,000	...	20,000	...	...	...	-20,000
Technical assistance grants	...	8,000	...	700	...	...	...	-700
Development grants	...	120,500	...	13,000	...	...	...	-13,000
Economic adjustment grants	...	26,000	...	600	...	...	...	-600
Research and evaluation	...	2,000	...	...	...	...	...	...
Total requirements	...	183,500	...	34,300	...	...	...	-34,300

Highlights of program changes:	1987			
	Base		Inc. (+) Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Economic development assistance programs	...	$34,300	...	-$34,300

The Administration proposes termination of EDA during 1986 as part of its policy of placing emphasis on the private sector and transferring primary responsibility for administering community and economic development assistance to State and local governments.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			...	$183,500
Transfer to "Grants and loans administration," General Administration			...	-40,000
Rescission of 1986 funds			...	-109,200
1987 base			...	34,300
Program changes			...	-34,300
Total requirements (1987 estimate)			...	...

ECONOMIC AFFAIRS:
BUREAU OF THE CENSUS

The Bureau of the Census collects, compiles, and publishes a broad range of current and periodic statistics including economic, social, and demographic data on population, housing, agriculture, governments, foreign trade, manufacturing, construction, mineral industries, and retail, wholesale, and service trades. The Salaries and Expenses appropriation provides for monthly, quarterly and annual surveys, and other programs that require a constant annual funding level. The Periodic Censuses and Programs appropriation provides for decennial and quinquennial censuses, and other programs that are cyclical in nature. Additionally, individual surveys are conducted for other Federal agencies on a reimbursable basis.

(Dollar amounts in thousands)

Summary of Appropriations:

	1985		1986 Appropriation		1987 Estimate		Inc.(+)Dec.(-)	
Appropriation title	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Salaries and expenses	2,245	$85,259	2,279	$90,400	2,271	$91,675	-8	+$1,275
Periodic censuses and programs	1,648	81,000	1,705	105,600	2,847	185,555	+1,142	+79,955
Total	3,893	166,259	3,984	196,000	5,118	277,230	+1,134	+81,230

SALARIES AND EXPENSES

	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
Comparison by activity:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Current economic statistics:								
Business statistics	324	$12,322	324	$12,580	328	$12,930	+4	+$350
Construction statistics	230	7,153	230	7,301	230	7,301	...	...
Manufacturing statistics	276	9,162	276	9,342	276	9,342	...	...
General economic statistics	230	8,869	230	9,021	207	7,621	-23	-1,400
Foreign trade statistics	515	14,699	515	14,991	526	15,591	+11	+600
Government statistics	150	4,822	150	4,910	150	4,910	...	...
Agriculture statistics	10	391	10	398	10	398	...	...
Subtotal	1,735	57,418	1,735	58,543	1,727	58,093	-8	-450
Current demographic statistics:								
Demographic surveys	358	25,968	358	26,379	358	26,379	...	...
Demographic reports	94	3,014	94	3,074	94	3,074	...	...
International statistics	18	613	18	630	18	630	...	...
Housing statistics	9	539	9	545	9	545	...	...
Subtotal	479	30,134	479	30,628	479	30,628	...	...
Other programs and publications:								
Statistical abstract and supplements	32	1,488	32	1,579	32	1,579	...	...
General research	18	686	18	695	18	695	...	...
Data systems development	15	674	15	679	15	679	...	...
Subtotal	65	2,848	65	2,954	65	2,954	...	...
Total requirements	2,279	90,400	2,279	92,125	2,271	91,675	-8	-450

	1987			
	Base		Inc.(+)Dec.(-)	
Highlights of program changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
Business statistics (CEN-15)	324	$12,580	+4	+$350
This increase provides for additional personal and business services industries to be included in annual service trade reports.				
General economic statistics (CEN-27)	230	9,021	-23	-1,400
Coverage of the Quarterly Financial Report is maintained at its 1984 level (-$400) and the survey used to update the Standard Statistical Establishment List is reduced (-23 pos.; -$1,000).				
Foreign trade statistics (CEN-32)	515	14,991	+11	+600
A new harmonized international trade data system containing information on imports, exports and domestic production will be in place by 1987. This increase provides for regular updating to maintain the accuracy and quality of this system.				

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			2,279	$90,400
Adjustments to base and built-in changes:				
Other increases:				
Restoration of 1986 pay reduction	...	+$939		
Full-year cost in 1987 of positions financed for part year in 1986	...	+39		
Within-grade step increases ($376 absorbed)	...	...		
Intermittent benefits	...	+67		
Federal Insurance Contributions Act (FICA)	...	+5		
Health insurance premiums	...	+36		
Rent payments to GSA	...	+78		
Federal Telecommunications System	...	+28		
Postal rates	...	+148		
Printing and reproduction	...	+160		
GSA extra services	...	+97		
Payment to Department of Labor for Employees' Compensation Fund	...	+79		
Working Capital Fund	...	+122		
Supplies and materials	...	+37		
Subtotal, other increases			...	+1,835
Other decreases:				
Management savings			...	-110
Total, adjustments to base and built-in changes			...	+1,725
1987 Base			2,279	92,125
Program changes			-8	-450
Total requirements (1987 estimate)			2,271	91,675

PERIODIC CENSUSES AND PROGRAMS

(Dollar amounts in thousands)

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Economic statistics programs:								
Economic censuses	250	$10,640	255	$12,179	264	$13,179	+9	+$1,000
Census of governments	25	941	25	5,352	25	5,352	...	...
Census of agriculture	145	6,322	337	14,156	332	11,556	-5	-2,600
Subtotal	420	17,903	517	31,687	621	30,087	+4	-1,600
Demographic statistics programs:								
Intercensal demographic estimates	72	2,554	70	2,617	70	2,617	...	...
Decennial census	686	51,245	1,703	78,899	1,703	78,899	...	...
Subtotal	758	53,799	1,773	81,516	1,773	81,516	...	...
Sample Redesign	...	...	...	...	14	650	+14	+650
Geographic support	527	18,622	439	16,115	439	16,115	...	...
Data processing systems	...	15,276	...	43,562	...	57,187	...	+13,625
Total requirements	1,705	105,600	2,829	172,880	2,847	185,555	+18	+12,675

Highlights of program changes:	1987 Base		1987 Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Economic censuses (CEN-67)	255	$12,179	+9	+$1,000
The economic censuses are conducted every five years to collect information on mineral, manufacturing, retail and wholesale trade and services, construction and transportation industries. In 1987 these censuses will be expanded to collect data on the hospital and transportation services industries.				
Census of agriculture (CEN-73)	337	14,156	-5	-2,600
The Farm and Ranch Identification Survey will be eliminated in 1987.				
Sample redesign (CEN-84)	...	...	+14	+650
Research on sample redesign and estimation techniques will begin in preparation for revisions to major demographic surveys based on results of the 1990 Census.				
Data processing systems (CEN-91)	...	43,562	...	+13,625
The 1987 request provides for the replacement of data entry equipment (+3,995) and the acquisition of automated equipment for use in the 1990 Census (+9,630).				

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			1,705	$105,600
Planned cyclical changes in periodic censuses			+1,124	+71,454
Adjustments to base and built-in changes:				
Other increases:				
Restoration of 1986 pay reduction	...	+$2,336		
Working Capital Fund	...	+126		
Subtotal, other increases			...	+2,462
Other decreases:				
Management savings	...	-3,686		
Productivity reviews	...	-2,950		
Subtotal, other decreases			...	-6,636
Subtotal, adjustments to base and built-in changes			...	-4,174
1987 Base			2,829	172,880
Program changes			+18	+12,675
Total requirements (1987 estimate)			2,847	185,555

ECONOMIC AFFAIRS:
ECONOMIC AND STATISTICAL ANALYSIS

Economic Analysis. Prepares and interprets the economic accounts of the U.S., consisting of the national income and product accounts, as summarized by the gross national product (GNP); the wealth accounts, which show the business and other components of national wealth; the input-output accounts, which trace interrelationships among industrial markets; regional economic accounts; and the U.S. balance of payments and associated foreign investment accounts. This work is supplemented by the preparation and analysis of surveys of business investment, econometric models, and a system of business indicators.

Policy Support. Provides information and analyses on the state of the economy and matters relating to economic policy, supports the Under Secretary for Economic Affairs with statistical coordination and conducts analyses of the cross-industry effects of economic developments.

Productivity, Technology and Innovation. Promotes private sector productivity improvements and cooperative research and development efforts. This activity is proposed to be phased out by the end of 1987. Appropriated funds will continue to be used to promote the commercialization of Government-owned inventions.

(Dollar amounts in thousands)

Summary of Appropriations:

Appropriation title	1985 Perm. Pos.	1985 Amount	1986 Appropriation Perm. Pos.	1986 Appropriation Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Salaries and expenses	618	$30,652	618	$30,500	567	$31,005	-51	+$505

SALARIES AND EXPENSES

Comparison by activity:	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Economic analysis	477	$22,287	477	$22,716	477	$23,466	...	+$750
Policy support	82	5,263	82	5,357	82	5,357	...	...
Productivity, technology and innovation	59	2,950	59	2,875	8	2,182	-51	-693
Total requirements	618	30,500	618	30,948	567	31,005	-51	+57

Highlights of program changes:	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Economic Analysis (ESA-17)	477	$22,716	...	+$750

This increase provides for needed improvements in the annual tabulations of corporate tax return data that are used to prepare the GNP measures.

Productivity, Technology and Innovation (ESA-32)	59	2,875	-51	-693

Productivity, Technology, and Innovation programs will be discontinued by September 30, 1987.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			618	$30,500
Adjustments to base and built-in changes:				
Other increases:				
Restoration of 1986 pay reduction	...	+$163		
Within-grade step increases ($228 absorbed)	...	...		
Federal Insurance Contributions Act (FICA)	...	+30		
Health insurance premiums	...	+8		
Domestic air fare	...	+6		
Rent payments to GSA	...	+288		
Federal Telecommunications System	...	+4		
Postal rates	...	+8		
Printing and reproduction	...	+51		
Payment to Department of Labor for Employees' Compensation Fund	...	+3		
Working Capital Fund	...	+126		
Supplies and materials	...	+11		
Subtotal, other increases			...	+698
Other decreases:				
Management savings	...	-150		
Planned decrease in Patent Licensing Program to be offset by other revenues	...	-100		
Subtotal, other decreases			...	-250
Total, adjustments to base and built-in changes			...	+448
1987 Base			618	30,948
Program changes			-51	+57
Total requirements (1987 estimate)			567	31,005

INTERNATIONAL TRADE ADMINISTRATION

The International Trade Administration develops the export potential of U.S. firms in a manner consistent with national security and foreign and economic policy and promotes an improved trade posture for U.S. industry. This is accomplished through four program activities:

- o Trade development activities strengthen export competitiveness through analyses of major industry sectors, analyses of domestic and international markets, and provision of information on trade, finance and investment.
- o International economic policy activities assist in formulation of U.S. economic policies and trade agreements, and studies of international trade.
- o Trade administration activities enforce U.S. trade laws to regulate exports and protect U.S. industry, consistent with foreign and domestic policy concerns.
- o The United States and Foreign Commercial Services provide exporting advice and export promotion services to U.S. firms through a network of offices covering 47 states and 63 foreign countries. This activity develops and distributes information products and conducts overseas trade promotion activities such as trade shows and trade fairs.

(Dollar amounts in thousands)

Summary of Appropriations:	1985		1986 Appropriation		1987 Estimate		Inc.(+)Dec.(-)	
Appropriation title	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Operations and administration	2,735	$189,635	2,867	$192,000	2,895	$179,170	+28	-$12,830

OPERATIONS AND ADMINISTRATION

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Trade development	584	$54,278	584	$41,233	556	$34,150	-28	-$7,083
International economic policy	223	13,199	223	13,826	223	13,826	...	...
Trade administration	764	48,056	764	50,659	832	55,248	+68	+4,589
U.S. and foreign commercial services	1,296	76,467	1,296	77,831	1,284	75,946	-12	-1,885
Total requirements	2,867	192,000	2,867	183,549	2,895	179,170	+28	-4,379

Highlights of program changes:	1987 Base		1987 Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Trade development (ITA-20)	584	$41,233	-28	-$7,083

Decreases are proposed in management and policy coordination (-$105) and sectoral analysis (-$1,368). These reductions will be realized through management efficiencies. The Administration also proposes to eliminate the Trade Adjustment Assistance Program since it has not been effective in assisting U.S. firms to adjust to import competition (-28 pos.; -$5,610).

Trade administration (ITA-37)	764	50,659	+68	+4,589

Export Administration activities will be increased to meet new or expanded statutory requirements resulting from the Export Administration Amendments Act of 1985 (+13 pos.; +$2,215).

Import Administration programs will be expanded to meet the growing complexity of investigations and the increased number of voluntary restraint steel agreements with other countries (+55 pos.; +$2,374).

U.S. and foreign commercial services (ITA-50)	1,296	77,831	-12	-1,885

Export Promotion Services will be reduced to eliminate activities which can be performed by the private sector (-12 pos.; -$1,371). Domestic Operations and Foreign Operations will be reduced to reflect administrative cost savings (-$514).

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			2,867	$192,000
Adjustments to base and built-in changes:				
Rescission of 1986 funds:				
Trade Adjustment Assistance			...	-10,890
Other increases:				
Restoration of 1986 pay reduction	...	+$771		
Full-year cost in 1987 of positions financed for part year in 1986	...	+3,030		
Within-grade step increases ($913 absorbed)	...	...		
Federal Insurance Contributions Act (FICA)	...	+41		
Rent payments to GSA	...	+2,821		
Federal Telecommunications System	...	+171		
Postal rates	...	+103		
Payment to Department of Labor for Employees' Compensation Fund	...	+22		
Other services	...	+503		
Working Capital Fund	...	+1,526		
Overseas wage and price increases	...	+1,335		
Subtotal, other increases			...	+10,323
Other decreases:				
Management savings	...	-107		
Non-recurring technical assistance grant	...	-3,500		
Non-recurring developmental costs of ADP systems	...	-4,277		
Subtotal, other decreases			...	-7,884
Total, adjustments to base and built-in changes			...	-8,451
1987 Base			2,867	183,549
Program changes			+28	-4,379
Total requirements (1987 estimate)			2,895	179,170

MINORITY BUSINESS DEVELOPMENT AGENCY

The Minority Business Development Agency (MBDA) coordinates Federal efforts to develop and strengthen new and existing minority businesses. On a cost-sharing basis, MBDA-funded Minority Business Development Centers (MBDC's) provide technical and management assistance to minority entrepreneurs. MBDA also conducts resource development, advocacy, research and information programs designed to strengthen the competitive position of minority businesses.

The Administration is proposing legislation to combine MBDA programs and certain activities currently performed by the Small Business Administration (SBA). Resources to carry out these other activities are not included in the amounts shown below.

(Dollar amounts in thousands)

Summary of Appropriations:

Appropriation title	1985 Perm. Pos.	1985 Amount	1986 Appropriation Perm. Pos.	1986 Appropriation Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Minority business development:								
Program level	233	$59,311	233	$57,000	233	$57,369	...	+$369
Cost-sharing	...	-9,731	...	-12,000	...	-12,000	...	...
Appropriation	233	49,580	233	45,000	233	45,369	...	+369

MINORITY BUSINESS DEVELOPMENT

Comparison by activity:	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Enterprise development	166	$36,388	166	$36,641	166	$36,641	...	...
Resource development	37	5,541	37	5,601	37	5,601	...	...
Advocacy, research and information	30	3,071	30	3,127	30	3,127	...	...
Total requirements	233	45,000	233	45,369	233	45,369	...	...

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			233	$45,000
Adjustments to base and built-in changes:				
Other increases:				
Restoration of 1986 pay reduction	...	+$73		
Within-grade step increases ($96 absorbed)	...	...		
Rent payments to GSA	...	+218		
Working Capital Fund	...	+132		
Subtotal, other increases			...	+423
Other decreases:				
Payment to Department of Labor for Employees' Compensation Fund	...	-3		
Management savings	...	-51		
Subtotal, other decreases			...	-54
Total, adjustments to base and built-in changes			...	+369
1987 Base			233	45,369
Program changes			...	...
Total requirements (1987 estimate)			233	45,369

UNITED STATES TRAVEL AND TOURISM ADMINISTRATION

The United States Travel and Tourism Administration (USTTA) coordinates the Federal role in international tourism. The Administration proposes to terminate this program in 1987, since its functions can be performed by the private, state and local tourism organizations.

(Dollar amounts in thousands)

Summary of Appropriations:

Appropriation title	1985 Perm. Pos.	1985 Amount	1986 Appropriation Perm. Pos.	1986 Appropriation Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Salaries and expenses	78	$11,532	80	$12,000	29	$4,023	-51	-$7,977

SALARIES AND EXPENSES

Comparison by activity:	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
International tourism development	68	$10,741	68	$10,741	22	$3,600	-46	-$7,141
Executive direction	12	1,259	12	1,259	7	423	-5	-836
Total requirements	80	12,000	80	12,000	29	4,023	-51	-7,977

Highlights of program changes:	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
International tourism development	68	$10,741	-46	-$7,141

Funds remaining in this activity are necessary to oversee the shutdown of USTTA program operations by December 31, 1986. Resources are included for severance pay for employees and transportation of employees and household effects from field offices.

	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Executive direction	12	1,259	-5	-836

Funds remaining in this activity are required to oversee the administrative processes necessary to complete the shutdown of USTTA by September 30, 1987.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			80	$12,000
1987 Base			80	12,000
Program changes			-51	-7,977
Total requirements (1987 estimate)			29	4,023

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NOAA programs are grouped into five areas: ocean and coastal, marine fishery resources, atmospheric, satellite and environmental data and information, and program support.

Ocean and coastal programs provide regulations and licensing functions for deep seabed mining and conduct research on a wide range of ocean and Great Lakes topics such as the interaction of the oceans and atmosphere; the concentration and disposition of pollutants; and general oceanographic research. Mapping and charting activities produce aeronautical and nautical charts and supporting documents which are compiled and sold to the public and other Federal agencies. The coastal zone management program provides assistance to states in the implementation of plans and policies for management of their coastline and acquires and manages marine and estuarine sanctuaries of national significance. Grants are provided to Sea Grant colleges to improve the use of our marine resources and develop academic expertise.

Marine fishery resource programs provide the basis for management of the fisheries within the 200-mile Fisheries Conservation Zone to ensure that fishery stocks continue as a renewable resource. Surveys of fishery stocks are made, catch data is collected, and research is conducted to better understand the variables that affect the abundance and variety of the resource. Protection of endangered marine species and enforcement of the laws and regulations regarding all living marine resources are included.

Atmospheric programs include the provision of weather warning and prediction services and supporting research. Meteorological observations of the atmosphere and earth's surface are gathered from staffed and automated stations on land and at sea and from weather satellites. On the basis of these observations, warnings and predictions are prepared and disseminated to the public. Research is conducted in several areas, ranging from improvements in technology for observations and forecast models, to investigations of the fundamental physical and chemical properties of the atmosphere. Satellite and environmental data and information services include the procurement and operation of the polar and geostationary weather satellites and the operation of a remote land sensing system, LANDSAT. The weather satellites are operated to provide observational data to the Weather Service. LANDSAT data is primarily used for agricultural and natural resource assessments. Environmental data and information is collected from NOAA and other sources, disseminated, and archived for future use.

Program support maintains and operates the fleet of NOAA ships and the research aircraft. Also included are executive direction, general administration and the Regional Administrative Support Centers (RASCs).

(Dollar amounts in thousands)

Summary of Appropriations:	1985		1986 Appropriation		1987 Estimate		Inc.(+)Dec.(-)	
Appropriation title	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Operations, research, and facilities	11,273	$1,241,243	11,012	$1,136,699	9,315	$836,479	-1,697	-$300,220
Construction	3	...	1	...	...	...	-1	...
Fishing vessel and gear damage compensation fund	3	...	3	...	...	...	-3	...
Fishermen's contingency fund	1	750	1	750	...	...	-1	-750
Foreign fishing observer fund	4	4,500	4	4,500	4	2,000	...	-2,500
Fisheries loan fund	2	2,500	...	...	...	...	...	...
Fishermen's guaranty fund	1	3,976	1	3,000	1	1,800	...	-1,200
Federal ship financing fund	20	27,097	20	...	...	...	-20	...
Subtotal	11,307	1,280,066	11,042	1,144,949	9,320	840,279	-1,722	-304,670
Special Fund:								
Promote and develop fishery products	...	9,051	...	8,007	...	...	...	-8,007
Trust fund:								
Aviation weather	...	27,000	...	28,000	...	77,500	...	+49,500
Subtotal	11,307	1,316,117	11,042	1,180,956	9,320	917,779	-1,722	-263,177
Proposal for later transmittal:								
Fishermen's guaranty fund	...	...	...	...	-1	-1,800	-1	-1,800
Total	11,307	1,316,117	11,042	1,180,956	9,319	915,979	-1,723	-264,977

OPERATIONS, RESEARCH, AND FACILITIES

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ocean and coastal programs:								
Non-living marine resources......	13	$1,525	13	$1,589	13	$1,589	...	...
Ocean research...................	268	36,688	249	37,237	242	21,958	-7	-$15,279
Ocean services...................	300	30,090	289	30,311	256	21,411	-33	-8,900
Sea grant........................	28	40,250	28	9,646	...	...	-28	-9,646
Coastal zone management..........	78	43,954	77	8,025	71	5,875	-6	-2,150
Mapping, charting, and geodesy programs.......................	709	46,095	535	45,098	535	41,580	...	-3,518
Subtotal.................	1,396	198,602	1,191	131,906	1,117	92,413	-74	-39,493
Marine fishery resource programs:								
Information collection and analyses........................	1,329	95,027	1,238	96,158	1,079	65,425	-159	-30,733
Conservation and management operations.....................	499	43,224	491	43,573	478	28,300	-13	-15,273
State and industry assistance programs.......................	248	23,858	223	18,857	69	2,964	-154	-15,893
Subtotal.................	2,076	162,109	1,952	158,588	1,626	96,689	-326	-61,899
Atmospheric programs:								
Public warning and forecast services........................	3,754	290,237	3,476	273,394	3,351	274,485	-125	+1,091
Atmospheric and hydrological research.......................	645	67,137	625	66,744	631	60,304	+6	-6,440
Subtotal.................	4,399	357,374	4,101	340,138	3,982	334,789	-119	-5,349
Satellite and environmental data and information services:								
Satellite services...............	544	72,418	431	70,231	432	72,606	+1	+2,375
Satellite systems................	...	240,129	...	240,129	...	168,139	...	-71,990
Data and information services	460	23,119	408	22,734	408	22,734	...	...
Subtotal.................	1,004	335,666	839	333,094	840	263,479	+1	-69,615
Program support:								
Executive direction and administration.................	1,213	52,129	1,171	52,504	1,163	53,004	-8	+500
Marine services..................	835	58,714	675	57,537	516	47,511	-159	-10,026
Aircraft services................	89	15,805	71	13,894	71	14,694	...	+800
Subtotal.................	2,137	126,648	1,917	123,935	1,750	115,209	-167	-8,726
Total requirements.................	11,012	1,180,399	10,000	1,087,661	9,315	902,579	-685	-185,082
Financing:								
Ocean and coastal programs funded from Coastal energy impact fund		-8,000				-8,300		
Fisheries Loan Fund..............						-1,800		
Deobligations....................						-10,000		
Budget authority...................		1,172,399				882,479		
Financing from proposed transfer:								
From "Promote and develop fishery products and research pertaining to American fisheries"...................		-35,700				-46,000		
Appropriation (general fund)......		1,136,699				836,479		

<table>
<tr><th rowspan="3">Highlights of program changes:</th><th colspan="4">1987</th></tr>
<tr><th colspan="2">Base</th><th colspan="2">Inc.(+)Dec.(-)</th></tr>
<tr><th>Perm. Pos.</th><th>Amount</th><th>Perm. Pos.</th><th>Amount</th></tr>
<tr><td>Ocean research (NOAA-41)</td><td>249</td><td>$37,237</td><td>-7</td><td>-$15,279</td></tr>
<tr><td colspan="5">In 1987, total funding for the Tropical Oceans-Global Atmosphere program is $2.8 million. The 1986 funding level included initial start-up funds no longer needed (-$2,000). The undersea research program will be terminated (-6 pos.; -$9,635). Funding will be reduced for the Great Lakes Environmental Research Laboratory (GLERL) (-$844) and for the Fisheries-Oceanography Coordinated Investigations (FOCI) program (-$1,000). Base programs of $3 million for GLERL and $2 million for FOCI will remain. The research program for seafloor spreading processes related to polymetallic sulfides will be eliminated (-1 pos.; -$1,800). Commercial development of polymetallic sulfide deposits is unlikely for some time.</td></tr>
<tr><td>Ocean services (NOAA-48)</td><td>289</td><td>30,311</td><td>-33</td><td>-8,900</td></tr>
<tr><td colspan="5">A decrease in the Ocean Services Program represents the reduced cost realized by distributing information through NOAA ports rather than establishing regional centers (-10 pos.; -$2,700). Decreases are requested for lower priority ocean assessment activities (-20 pos.; -$5,800); the circulatory survey program (-3 pos.; -$300); and the tides and water levels program (-$100).</td></tr>
<tr><td>Sea grant (NOAA-53)</td><td>28</td><td>9,646</td><td>-28</td><td>-9,646</td></tr>
<tr><td colspan="5">The Sea Grant program (-28 pos.; -$8,396) and the National Coastal Resources Research and Development Institute (-$1,250) are proposed for termination.</td></tr>
<tr><td>Coastal zone management (NOAA-56)</td><td>77</td><td>8,025</td><td>-6</td><td>-2,150</td></tr>
<tr><td colspan="5">States assistance grants are proposed for termination in 1986. Decreases are requested to reduce program management (-6 pos.; -$650); limit acquisition of new sanctuary sites (-$800); and reduce onsite management and related research activities at nine marine sanctuaries (-$700).</td></tr>
<tr><td>Mapping, charting, and geodesy programs (NOAA-61)</td><td>535</td><td>45,098</td><td>...</td><td>-3,518</td></tr>
<tr><td colspan="5">In 1986, aeronautical and nautical chart prices are being increased to other Federal agencies and the public to reflect more accurately their true market value. In 1987, the prices to Federal users will be further increased to cover overhead costs (-$1,318). Decreases are requested for vertical network readjustment activities (-$500); technical support to state geodesy programs (-$550); and state-specific geodetic surveys (-$400). The 1986 add-on for the multipurpose cadastre system is not requested in 1987 (-$750).</td></tr>
<tr><td>Information collection and analyses (NOAA-69)</td><td>1,238</td><td>96,158</td><td>-159</td><td>-30,733</td></tr>
<tr><td colspan="5">Decreases are proposed for resource surveys and protected species research (-14 pos.; -$2,961); research on the effect of habitat conditions on fish stocks (-63 pos.; -$5,133); fisheries statistics (-18 pos.; -$3,100); and analyses of ecosystems, nearshore fisheries and stock abundance (-13 pos.; -$974). The aquaculture program is proposed for termination (-28 pos.; -$3,097). Various studies and research projects will not require funding in 1987, including Chesapeake Bay studies, SEAMAP, MARFIN, and fishing gear entanglement studies (-13 pos.; -$9,918). Federal funds are no longer needed for dock improvements in Pascagoula (-$500) and for salmon enhancement activities in Alaska (-$3,350). Pacific Salmon Treaty funding will be reduced; some initial start-up costs are non-recurring. A base of $12 million remains (-10 pos.; -$1,000). Marine mammal research funds will be reduced in order to fund Fisheries Oceanography Coordinated Investigations (-$1,500). An increase is proposed for a five-year dolphin monitoring program in the Eastern Tropical Pacific as mandated by 1984 amendments to the Marine Mammal Act. This initiative will be funded by a transfer of unobligated balances from the Fisheries Loan Fund (+$800).</td></tr>
<tr><td>Conservation and management operations (NOAA-80)</td><td>491</td><td>43,573</td><td>-13</td><td>-15,273</td></tr>
<tr><td colspan="5">Reductions are proposed for the Regional Fishery Management Councils (-$3,500) and for environmental impact analysis and habitat conservation activities (-13 pos.; -$2,269). The salmon vessel buy-back program expired at the end of 1986; reauthorization is not requested (-$1,250). Legislation is proposed to transfer funding for the Columbia River hatcheries to a non-Federal source (-$8,254).</td></tr>
</table>

Highlights of program changes:	1987 Base		1987 Inc.(+)Dec.(-)	
State and industry assistance programs (NOAA-86)...........................	223	$18,857	-154	-$15,893

Grants to states under the Commercial Fisheries Research and Development Act (-$4,250), anadromous fisheries grants (-$932), and striped bass research (-$500) will be terminated. Fisheries market development will be eliminated (-52 pos.; -$3,000); and product quality and safety programs reduced (-86 pos.; -$4,555). Funds for menhaden and fish oil research are not requested (-$2,000). Resources to close out financial assistance programs will be transferred to the Grants and Loans Administration (-16 pos.; -$656).

Public warning and forecast services (NOAA-93)........................... 3,476 273,394 -125 +1,091

Increases are proposed for the continuation of the Advanced Weather Interactive Processing System (AWIPS) program (+$5,860), and the Automation of Surface Observing Systems (ASOS) program (+$4,640). The Administration is proposing consolidations and other efficiencies in NWS to streamline overhead. These measures include reducing staff at 8 Weather Service Forecast Offices (-35 pos.; -$836); consolidating the four-region management structure into three regions and closing the NWS Southern Region Headquarters (-18 pos.; -$852); and combining managerial functions of the NWS Pacific Region Headquarters and the Alaska Region Headquarters Offices (-11 pos.; -$407). Micronesia Weather Services will be funded by DOI as approved by Congress under P.L. 99-239 (-$456). Reductions are proposed for Data Buoy Center system engineering and test capability and maintenance of low priority moored buoys (-$1,174); non-Federal fire weather services (-8 pos.; -$300); meteorological technician staffing (-16 pos.; -$576); and emergency power at WSFOs with Weather Radio broadcast responsibility (-$400). The agricultural weather and fruit frost programs are proposed for termination (-37 pos.; -$1,418). Also proposed is the elimination of maintenance and system upgrade funding for the Colorado and Susquehanna River Basin flood warning systems (-$2,990).

Atmospheric and hydrological research (NOAA-106)........................... 625 66,744 +6 -6,440

Increases are proposed for hurricane prediction research (+4 pos.; +$1,000); research on remote sensing instrumentation for the thermodynamic system (+$500); and the monitoring of and research on radiatively important trace species (+5 pos.; +$1,000). Decreases are proposed in the Program for Regional Observing and Forecasting Services (-$2,000), meteorological and hydrological research (-3 pos.; -$340); State-specific weather modification activities (-$2,250); mesoscale storm research (-$2,250), Global Atmospheric Research Program funding associated with the TOGA program (-$1,000); and the Western Regional Climate Forecast Center (-$800). Research at the Space Environment Laboratory will be reduced (-$300); a base program of $1.2 million will remain.

Satellite services (NOAA-116)... 431 70,231 +1 +2,375

The Administration proposes to establish a NESDIS Mission Control/Data Distribution Center for Search and Rescue (SAR) operations (+1 pos.; +$3,775). LANDSAT-5 operations will continue at a reduced level (-$1,400). No further subsidies are requested for Land Remote Sensing.

Satellite systems (NOAA-121)... ... 240,129 ... -71,990

Normal cost fluctuations in multi-year procurement and launch schedules will result in a net decrease for GOES (-$25,453). Other decreases are associated with the scheduled completion of modifications to GOES ground systems (-$1,461). Increases are requested for ground system improvements for the next polar and GOES series (+$17,150). A one-satellite polar orbiting system is proposed (-$62,226).

Executive direction and administration (NOAA-133)........................... 1,171 52,504 -8 +500

A permanent fund for repairs of fisheries facilities will be established by transferring funds from the Fisheries Loan Fund in 1987 (+$1,000). Beginning in 1988, the repairs fund will be financed through new budget authority. No funds are requested for the National Advisory Committee on Oceans and Atmosphere (NACOA) (-8 pos.; -$500).

Highlights of program changes:	1987			
	Base		Inc. (+)Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Marine services (NOAA-136)...	675	$57,537	-159	-$10,026

The Administration proposes to obtain fisheries research ship support through charter; deactivate the McARTHUR, the WHITING, and the FERREL; and reduce days at sea (-156 pos.; -$10,258). Further savings can be achieved through closing a secondary support facility (-3 pos.; -$300) and adjusting the ship rehabilitation program to the proposed fleet size (-$368). Funds for global positioning systems studies should be deleted because the studies have been completed (-$200). An increase is requested to begin acquisition of multi-beam bathymetric survey systems for two Class I ships (+$1,100).

	Perm. Pos.	Amount	Perm. Pos.	Amount
Aircraft services (NOAA-143)..	71	13,894	...	+800

Aircraft maintenance funds are reduced (-$900). An increase is requested to fund 30 percent of a cooperative effort with the Air Force to upgrade hurricane reconnaissance instruments (+$1,700).

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			11,012	$1,136,699
Adjustments to base and built-in changes:				
Transfers:				
Enacted:				
From "Promote and develop fishery products pertaining to American fisheries"		+$35,700		
From "Coastal energy impact fund"		+8,000		
Proposed:				
From "Construction"	+1	...		
Subtotal, transfers			+1	+43,700
Rescission of 1986 funds:				
Coastal Zone Management grants	...	-36,000		
Sea Grant	...	-30,604		
Subtotal, rescission of 1986 funds			...	-66,604
Other increases:				
Deficit Reduction Act restoration	...	+4,546		
Satellite research restoration	...	+250		
Restoration of 1986 pay reduction	...	+2,887		
Within-grade step increase ($1,794 absorbed)	...	...		
NOAA Corp commissioned officers longevity ($122 absorbed)	...	...		
Personnel compensation	...	+153		
Personnel benefits	...	+783		
Benefits for former personnel	...	+387		
Rent, communications, and utilities	...	+1,812		
Contractual services	...	+925		
Subtotal, other increases			...	+11,743
Other decreases:				
Non-recurring program costs	...	-9,985		
Administrative cost savings	-260	-7,875		
Productivity reviews	-728	-7,151		
Next Generation Weather Radar program funding transfer	-25	-12,866		
Subtotal, other decreases			-1,013	-37,877
Total adjustments to base and built-in changes			-1,012	-49,038
1987 base			10,000	1,087,661
Program changes			-685	-185,082
Subtotal, program requirements			9,315	902,579
Financing:				
Program funded from:				
"Coastal energy impact fund" (reimbursable)			...	-8,300
Deobligations			...	-10,000
Transfers from:				
"Promote and develop fishery products and research pertaining to American fisheries"			...	-46,000
"Fisheries loan fund"			...	-1,800
1987 appropriation (general fund)			9,315	836,479

PROMOTE AND DEVELOP FISHERY PRODUCTS AND RESEARCH PERTAINING TO AMERICAN FISHERIES

Comparison by activity:	1986 Currently Available Perm. Pos.	Amount	1987 Base Perm. Pos.	Amount	1987 Estimate Perm. Pos.	Amount	Inc.(+)Dec.(-) Perm. Pos.	Amount
Saltonstall-Kennedy grants............	...	$8,007	...	$8,007	...	...	...	-$8,007

Highlights of program changes:	1987 Base Perm. Pos.	Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	Amount
Saltonstall-Kennedy grants (NOAA-153)....................................	...	$8,007	...	-$8,007

No funds for grants are requested in 1987. Estimated receipts of $46 million are proposed for transfer to the "Operations, research, and facilities" appropriation.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation adjusted currently available, 1986...........................			...	$8,007
1987 base..			...	8,007
Program changes..			...	-8,007
Total requirements (1987 estimate)......................................			...	...

FISHING VESSEL AND GEAR DAMAGE COMPENSATION FUND

Comparison by activity:	1986 Currently Available Perm. Pos.	Amount	1987 Base Perm. Pos.	Amount	1987 Estimate Perm. Pos.	Amount	Inc.(+)Dec.(-) Perm. Pos.	Amount
Administrative expenses................	3	...	3	...	...	...	-3	...
Payment of claims......................	...	...	...	...	...	...	...	...
Total requirements	3	...	3	...	...	...	-3	...

Highlights of program changes:	1987 Base Perm. Pos.	Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	Amount
Fishing vessel and gear damage compensation fund (NOAA-154)................	3	...	-3	...

This fund is proposed for termination in 1987, and any remaining balances will be transferred to the General Fund of the Treasury.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			3	...
1987 base			3	...
Program changes			-3	...
Total requirements (1987 estimate)			...	...

FISHERMEN'S CONTINGENCY FUND

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Administrative expenses	1	$60	1	$60	...	...	-1	-$60
Payment of claims	...	690	...	690	...	...	...	-690
Total requirements	1	750	1	750	...	...	-1	-750

Highlights of program changes:	1987 Base		1987 Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Fishermen's contingency fund (NOAA-155)	1	$750	-1	-$750

The program is proposed for termination in 1987, and any remaining balances will be rebated to leaseholders.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			1	$750
1987 base			1	750
Program changes			-1	-750
Total requirements (1987 estimate)			...	...

FOREIGN FISHING OBSERVER FUND

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Foreign fishing observer fund	4	$4,500	4	$4,500	4	$2,000	...	-$2,500

Highlights of program changes:	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Foreign fishing observer fund (NOAA-163)...................................	4	$4,500	...	-$2,500

Amendments to the Magnuson Fishery Conservation Act now allow foreign governments to contract for observer services from contractors approved by the Secretary of Commerce. The current level of coverage is expected to continue with a decrease in direct appropriations and an increase in direct contracts.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986....................................			4	$4,500
1987 base..			4	4,500
Program changes..			...	-2,500
Total requirements (1987 estimate)...			4	2,000

FISHERMEN'S GUARANTY FUND

Comparison by activity:	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Administrative expenses..................	1	$28	1	$28	1	$28	...	...
Payment of claims........................	...	2,972	...	2,972	...	1,772	...	-$1,200
Total requirements.......................	1	3,000	1	3,000	1	1,800	...	-1,200

Highlights of program changes:	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Fishermen's guaranty fund (NOAA-172).......................................	1	$3,000	...	-$1,200

The fund is proposed to be transferred to the Department of State in 1987, where appropriations of $1.8 million for 1987 will be requested.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986....................................			1	$3,000
1987 base..			1	3,000
Program changes..			...	-1,200
Total requirements (1987 estimate)...			1	1,800

AVIATION WEATHER TRUST FUND

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Aviation weather......................	...	$28,000	...	$28,000	...	$30,000	...	+$2,000
Aviation warning and forecast systems.	...	...	...	...	...	47,500	...	+47,500
Total requirements	...	28,000	...	28,000	...	77,500	...	+49,500

Highlights of program changes:	1987 Base		1987 Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Aviation weather trust fund (NOAA-181)....................................	...	$28,000	...	+$49,500

Funds to support additional airports requiring FAA services because of airline industry deregulation are requested (+$2,000). Beginning in 1987, both the FAA and NOAA contributions for Next Generation Radar (NEXRAD) will be financed from the FAA Airport and Airway Trust Fund. Planned activities include limited radar production, initial operational test and evaluation, training of personnel, initiating full-scale production, and land acquisition for NEXRAD sites (+$47.500).

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986....................................			...	$28,000
1987 base..			...	28,000
Program changes..			...	+49,500
Total requirements (1987 estimate)...			...	77,500

PATENT AND TRADEMARK OFFICE

The Patent and Trademark Office (PTO) administers the Patent and Trademark laws of the United States, evaluates patent and trademark applications and disseminates technological information disclosed in patents.

(Dollar amounts in thousands)

Summary of Appropriations:	1985		1986 Appropriation		1987 Estimate		Inc.(+)Dec.(-)	
Appropriation title	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Salaries and expenses:								
Program level	3,438	$209,500	3,408	$220,179	3,401	$243,444	-7	+$23,265
Fee collections	...	-109,341	...	-119,486	...	-131,827	...	-12,341
Deferral of prior year funds	...	...	...	-15,993		-1,985	...	+14,008
Total	3,438	100,159	3,408	84,700	3,401	109,632	-7	+24,932

SALARIES AND EXPENSES

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Patent process	2,128	$137,819	2,128	$142,130	2,071	$152,290	-57	+$10,160
Trademark process	262	12,876	262	13,290	266	14,607	+4	+1,317
Information dissemination	521	42,033	521	43,043	526	42,169	+5	-874
Executive direction	497	27,451	497	28,684	538	34,378	+41	+5,694
Total requirements	3,408	220,179	3,408	227,147	3,401	243,444	-7	+16,297
Fee collections	...	-119,486	...	-119,486	...	-131,827	...	-12,341
Deferral of prior year funds	...	-15,993	...	...	...	-1,985	...	-1,985
Appropriation	3,409	84,700	3,408	107,661	3,401	109,632	-7	+1,971

Highlights of program changes:

The Automation Master Plan, mandated by Section 9 of P.L. 96-517, provides the basis for automating PTO operations. A total increase of $14.6 million is distributed among the budget activities to provide funds to implement the integrated Automated Trademark System and to expend the automation of patent processes to the chemical patent examining groups.

	1987 Base		1987 Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Patent process (PTO-21)	2,128	$142,130	-57	+$10,160

An increase in Automation resources provides funds for initiatives designed to improve the quality of patent processing by automating the search and retrieval functions of patent examination (+$9,647) and preparing examiner workstations for Automation (+$891). The reduction in permanent positions reflects projected attrition and shifts in examiner staffing patterns (-60 pos.; -$484). In-house automated search capabilities permit a reduction in the use of commercial data bases (-$312). Growth in patent applications from 107,000 to 116,000 annually requires additional resources for patent printing and the Board of Patent Appeals and Interferences (+3 pos.; +$418).

	1987 Base		1987 Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Trademark process (PTO-31)	262	13,290	+4	+1,317

All trademark operations are financed through fee collections. In 1987, funds will be used for text editing and proofreading (+$296). To improve the efficiency and capabilities of the Automated Trademark System, funds are provided to integrate two existing search and retrieval systems (+$901). Resources also are provided to reduce the 6,400 case backlog of the Trademark Trial and Appeal Board (+4 pos.; +$120).

Highlights of program changes continued:	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Information dissemination (PTO-40)	521	$43,043	+5	-$874

Increases are provided for microfilming, maintenance of the Trademark Search Room and overhaul of copy system equipment (+5 pos.; +$531). In accordance with the Revised Automation Master Plan, a reduction in the costs of the Automated Patent System and the Data Input/Output System supportive of the patent classification systems are reflected here (-$1,405).

	Base Perm. Pos.	Base Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Executive direction (PTO-51)	497	28,604	+41	+5,694

Increased costs for Patent Automation and Data Base Automation, staff requirements and Automation support are provided (+32 pos.; +$5,484). Support includes systems analysis and design; acquisition, development, installation and testing of computer systems and software; and general purpose ADP and communication equipment. An increase in mail room personnel is provided to process the increasing volume of applications (+9 pos.; +$210).

	Base Perm. Pos.	Base Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Fee collections (PTO-66)	...	-119,496	...	-12,341

During this second year of the 1986-1988 fee cycle, PTO projects that it will collect $119.5 million in patent, trademark and service fees. Increased fee collections reflect the growth in patent and trademark applications and the greater cost of providing services and materials to PTO customers.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986:				
General fund			3,408	+$84,700
Budgeted fee collections			...	+119,486
Deferral of prior year funds			...	+15,993
Subtotal, 1986 currently available			3,408	220,179
Adjustments to base and built-in changes:				
Other increases:				
Restoration of 1986 pay reduction	...	+$4,745		
Full-year cost in 1987 of positions financed for part year in 1986	...	+542		
Within-grade step increases ($866 absorbed)	...	...		
Health Insurance Premiums	...	+63		
Employee benefits	...	+472		
Rent Payments to GSA	...	+638		
Federal Telecommunications System	...	+20		
Postal Rates	...	+110		
Overtime utilities	...	+58		
Rental of ADP equipment	...	+32		
Working Capital Fund	...	+165		
Maintenance of equipment	...	+112		
Supplies and materials	...	+74		
Subtotal, other increases			...	+7,031
Other decreases:				
Payment to Department of Labor for Employees' Compensation Fund	...	-$27		
Non-recurring equipment purchase	...	-36		
Subtotal, other decreases			...	-63
Total, adjustment to base and built-in changes			...	+6,968
1987 Base			3,408	227,147
Program changes			-7	+16,297
Total requirements			3,401	243,444
Fee collections			...	-131,827
Deferral of prior year funds			...	-1,985
1987 estimate			3,401	109,632

NATIONAL BUREAU OF STANDARDS

The National Bureau of Standards (NBS) provides a wide range of measurements, services, test methods and data used throughout U.S. industry. This is accomplished through research in the physical, chemical, mathematical and engineering sciences and through cooperative efforts with other government, industry, and academic research institutions. These activities allow NBS to maintain our national standards for measurements; support domestic and international voluntary standards processes; promote technological innovation by the research community; and spur advances in applied and developmental research being conducted by U.S. industries.

(Dollar amounts in thousands)

Summary of Appropriations:	1985		1986 Appropriation		1987 Estimate		Inc.(+)Dec.(-)	
Appropriation title	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Scientific and technical research and services	1,746	$123,485	1,768	$123,985	1,625	$123,953	-143	-$32

SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Measurement and engineering research and standards:								
Measurement research and standards	521	$37,121	535	$39,314	535	$39,314	...	...
Materials science and engineering	286	21,108	293	22,007	297	22,790	+4	+$783
Engineering measurements and standards	564	36,473	512	36,476	439	29,185	-73	-7,291
Computer sciences and technology	169	9,657	147	9,657	112	5,000	-35	-4,657
Research support activities	228	19,626	236	20,255	242	27,664	+6	+7,409
Total requirements	1,768	123,985	1,723	127,709	1,625	123,953	-98	-3,756
Transfer to working capital fund	...	(2,102)	...	(1,454)	...	(2,144)	...	(+690)

Highlights of program changes:	1987 Base		1987 Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Materials science and engineering (NBS-34)	293	$22,007	+4	+$783

Better measurement methods, standards, and data are necessary for more complete commercialization of advanced materials. This increase provides funds for research on production and performance characteristics of advanced ceramics.

Engineering measurements and standards (NBS-50)	512	36,476	-73	-7,291

This activity includes funds for research on scientific barriers to commercialization of fiber-optics (+8 pos.; +$950). Appropriated funding is eliminated for the Centers for Building Technology (-41 pos.; -$3,100) and Fire Research (-40 pos.; -$5,141). This results from a concern that the Federal Government may be undertaking efforts that are more properly the role of the private sector and state and local governments.

Computer sciences and technology (NBS-59)	147	9,657	-35	-4,657

The Institute for Computer Sciences and Technology is funded at a $5 million program level. This level of funding is consistent with the Administration's policy to reduce Federal spending and wherever feasible to transfer activities to the private sector.

Highlights of program changes continued:	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Research support activities (NBS-69)	236	$20,255	+6	+$7,409

This activity includes funds to begin construction of a Cold Neutron Research Facility for use by both industry and government researchers (+31 pos.; +$10,000) and for additional staffing to make full use of the Department of Commerce Consolidated Scientific Computer System (+$550). Funding for the Technical Competence Fund is reduced to $7.5 million consistent with the White House Science Council's recommendation concerning laboratory discretionary funds (-25 pos.; -$1,500). Funds for the Research Associates Program are reduced to $0.9 million making the NBS program comparable to those in other Federal Government research organizations of similar size and scope (-$1,641).

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			1,768	$123,985
Adjustments to base and built-in changes:				
Other increases:				
Restoration of 1986 pay reduction	...	+$495		
Full-year cost in 1987 of positions financed for part year in 1986	...	+560		
Within-grade step increases ($865 absorbed)	...	...		
Federal Insurance Contributions Act (FICA)	...	+201		
Health insurance premiums	...	+45		
Travel and transportation of persons and things	...	+32		
Communications, utilities, and other rent	...	+321		
Other services	...	+232		
Supplies and materials	...	+166		
Equipment	...	+2,342		
Subtotal, other increases			...	+4,384
Other decreases:				
Reduced appropriation transfer for Standard Reference Materials	...	-100		
Payment to Department of Labor for Employees' Compensation Fund	...	-26		
Federal Telecommunications System	...	-7		
Productivity reviews	-45	-527		
Subtotal, other decreases			-45	-660
Total, adjustments to base and built-in changes			-45	+3,724
1987 Base			1,723	127,709
Program changes			-98	-3,756
Total requirements (1987 estimate)			1,625	123,953

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

The National Telecommunications and Information Administration (NTIA) develops national policy to support the development, growth and deregulation of telecommunications and information industries; furthers the efficient development and use of telecommunications and information services; allocates and manages Federal use of the radiofrequency spectrum; and provides grants for construction of public telecommunications facilities.

(Dollar amounts in thousands)

Summary of Appropriations:

Appropriation title	1985 Perm. Pos.	1985 Amount	1986 Appropriation Perm. Pos.	1986 Appropriation Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Salaries and expenses	212	$13,511	199	$13,400	196	$13,916	-3	+$516
Public telecommunications facilities, planning and construction	10	23,968	12	24,000	...	...	-12	-24,000
Total	222	37,479	211	37,400	196	13,916	-15	-23,484

SALARIES AND EXPENSES

Comparison by activity:	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+)Dec.(-) Perm. Pos.	Inc.(+)Dec.(-) Amount
Domestic, Federal and international policies:								
Domestic and Federal policies	13	$1,186	13	$1,213	13	$1,213	...	...
International policies	8	707	8	732	8	1,232	...	+$500
Subtotal	21	1,893	21	1,945	21	2,445	...	+500
Spectrum management:								
Spectrum plans and policies	24	1,493	24	1,547	24	1,547	...	...
Spectrum management, analysis and operations	115	6,624	112	6,440	112	6,440	...	...
Subtotal	139	8,117	136	7,987	136	7,987	...	...
Telecommunication sciences research:								
Spectrum research and analysis	24	1,838	24	1,896	24	1,896	...	...
Systems and networks research and analysis	15	1,552	15	1,588	15	1,588	...	...
Subtotal	39	3,390	39	3,484	39	3,484	...	...
Total requirements	199	13,400	196	13,416	196	13,916	...	+500

Highlights of program changes:

	1987 Base Perm. Pos.	1987 Base Amount	1987 Inc.(+)Dec.(-) Perm. Pos.	1987 Inc.(+)Dec.(-) Amount
Domestic, Federal, and international policies (NTIA-16)	8	$732	...	+$500

NTIA is the primary executive branch representative at the growing number of conferences and on issues pertaining to international telecommunications. An increase is provided for additional staffing for international conference preparation, policy development, and bilateral trade support activities in this area (+$500).

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			199	$13,400
Adjustments to base and built-in changes:				
Other increases:				
Restoration of 1986 pay reduction	...	+$76		
Within-grade step increases ($132 absorbed)	...	...		
Federal Insurance Contributions Act (FICA)	...	+11		
Rent payments to GSA	...	+333		
Federal Telecommunications System	...	+6		
Postal rates	...	+4		
Printing and reproduction	...	+9		
Other services	...	+127		
Subtotal, other increases			...	+566
Other decreases:				
Non-recurring cost of computer software upgrade	...	-450		
Productivity reviews	-3	-100		
Subtotal, other decreases			-3	-550
Total, adjustments to base and built-in changes			-3	+16
1987 Base			196	13,416
Program changes			...	+500
Total requirements (1987 estimate)			196	13,916

PUBLIC TELECOMMUNICATIONS FACILITIES, PLANNING AND CONSTRUCTION

Comparison by activity:	1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Public telecommunications facilities	12	$24,000	12	$1,200	...	...	-12	-$1,200

Highlights of program changes:	1987			
	Base		Inc.(+)Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount
Public telecommunications facilities	12	$1,200	-12	-$1,200

The Public Telecommunications Facilities grants program has provided grants for planning and construction of public telecommunications facilities in areas not previously served. Since over 95% of the United States currently receives public broadcast programming, funding for this grant program is not requested in 1987. Funding to complete close out of the program is requested in the Grants and Loans Administration.

Summary of changes from 1986 appropriation:	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation currently available, 1986			12	$24,000
Rescission of 1986 funds:				
Public Telecommunications Facilities Program			...	-22,800
1987 Base			12	1,200
Program changes			-12	-1,200
Total requirements (1987 estimate)			...	...

PROPOSED FOR LATER TRANSMITTAL

MINORITY BUSINESS DEVELOPMENT AGENCY

The Administration proposes to consolidate the Federal minority business assistance programs in the Minority Business Development Agency in fiscal year 1987. Under the proposal, the Small Business Administration's minority small business procurement assistance program (authorized under Section 8(a) of the Small Business Act) will be transferred to the Department of Commerce.

Minority Business Development

Comparison by activity:	1987 Estimate Perm. Pos.	1987 Estimate Amount
Federal procurement assistance...............	283	$11,406

SMALL BUSINESS ADMINISTRATION

The Administration proposes the transfer of the Small Business Administration to the Department of Commerce in fiscal year 1987. This proposal would establish the Small Business Administration as an agency within the Department of Commerce, thereby helping to consolidate Federal business assistance programs.

Small Business Administration

Comparison by activity:	1987 Estimate Perm. Pos.	1987 Estimate Amount
Procurement and technical assistance.........	237	$12,015
Management Assistance........................	10	3,248
Innovation research and technology...........	7	1,143
Advocacy/National Advisory Council...........	28	5,028
Management and Administration................	16	4,850
Hearing and appeals..........................	10	546
Executive direction -- size standards........	6	380
Appropriation................................	314	$27,210

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

The Administration proposes to transfer the Fishermen's Guaranty Fund to the Department of State in fiscal year 1987.

Fishermen's Guaranty Fund

	1987 Estimate	
Comparison by activity:	Perm. Pos.	Amount
Administrative expenses	-1	$ -28
Payment of claims	...	-1,772
Appropriation	-1	$-1,800

BRIDGE FROM 1986 AND 1987 APPROPRIATIONS TO 1986 AND 1987 BUDGET AUTHORITY
(Dollar amounts in thousands)

	1986	1987	Change 1986 to 1987
Annual Appropriation Act	$2,108,334	$1,663,827	-$444,507
Transfer to "Promote and develop fishery products and research pertaining to American fisheries", NOAA	43,707	46,000	+2,293
Subtotal, Federal Funds	2,152,041	1,709,827	-442,214
Trust Funds	63,209	114,339	+51,130
Offsetting Receipts	-81,176	-91,778	-10,602
Budget Authority, Department of Commerce	2,134,074	1,732,388	-401,686

COMPARISON OF 1987 ESTIMATE WITH 1985 AND 1986 APPROPRIATIONS ENACTED TO DATE
(Dollar amounts in thousands)

	1985 Actual		1986 Appropriation		1987 Estimate		Inc. (+) or Dec. (-) 1987 over 1986	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
GENERAL ADMINISTRATION:								
Salaries and expenses	603	$36,483	578	$32,300	579	$39,250	+1	$6,950
Special foreign currency program	...	500	...	...	...	...	...	...
Subtotal, GA	603	36,983	578	32,300	579	39,250	+1	+6,950
[ECONOMIC DEVELOPMENT ADMINISTRATION]:								
Grants and loans administration	434	28,380	400	26,000	250	... 1/	-150	-26,000
Economic development assistance programs	...	230,730	...	183,500	...	...	...	-183,500
Subtotal, EDA	434	259,110	400	209,500	250	...	-150	-209,500
BUREAU OF THE CENSUS:								
Salaries and expenses	2,245	85,259	2,279	90,400	2,271	91,675	-8	+1,275
Periodic censuses and programs	1,648	81,000	1,705	105,600	2,847	185,555	+1,142	+79,355
Subtotal, Census	3,893	166,259	3,984	196,000	5,118	277,230	+1,134	+81,230
ECONOMIC AND STATISTICAL ANALYSIS:								
Salaries and expenses	618	30,652	618	30,500	567	31,005	-51	+505
INTERNATIONAL TRADE ADMINISTRATION:								
Operations and administration	2,735	192,418	2,867	192,000	2,895	179,170	+28	-12,830
MINORITY BUSINESS DEVELOPMENT AGENCY:								
Minority business development	229	49,580	233	45,000	233	45,369	...	+369
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION:								
Salaries and expenses	78	11,532	80	12,000	29	4,023	-51	-7,977
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION:								
Operations, research, and facilities	11,273	1,241,243	11,012	1,136,699	9,315	836,479	-1,697	-300,220
Federal ship financing fund	20	27,097	20	...	...	...	-20	...
Fishermen's contingency fund	1	750	1	750	...	...	-1	-750
Foreign fishing observer fund	4	4,500	4	4,500		2,000	...	-2,500
Fishermen's guaranty fund	1	3,976	1	3,000	...	1,800	-1	-1,200
Fisheries loan fund	2	2,500	...	...	...	...	...	...
Subtotal, NOAA	11,301	1,280,066	11,038	1,144,949	9,319	840,279	-1,719	-304,670
PATENT AND TRADEMARK OFFICE:								
Salaries and expenses	3,438	100,159	3,408	84,700	3,401	109,632	-7	+24,932
NATIONAL BUREAU OF STANDARDS:								
Scientific and technical research and services	1,746	123,485	1,768	123,985	1,625	123,953	-143	-32
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION:								
Salaries and expenses	212	13,511	199	13,400	196	13,916	-3	+516
Public telecommunications facilities, planning and construction	10	23,968	12	24,000	...	...	-12	-24,000
Subtotal, NTIA	222	37,479	211	37,400	196	13,916	-15	-23,484
Total, Department of Commerce 2/	25,297	2,287,723	25,185	2,108,334	24,212	1,663,827	-973	-444,507

1/ Proposed to be funded in 1987 at $21,591,000 from a reappropriation of unobligated balances in 1986.

2/ Excludes permanent positions from the National Oceanic and Atmospheric Administration accounts without current appropriations as follows: 1985, 6; 1986, 4.

Summary of Requirements with Detail of Adjustments to Base and Built-in Changes

(Dollar amounts in thousands)

	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriations currently available, 1986			25,189	$2,108,334
Adjustments to base and built-in changes:				
Financing:				
From prior year appropriations			...	4,692
Fees collections in 1987			...	119,486
Fees from prior year deferral			...	15,993
Planned cyclical changes in Periodic censuses			1,124	71,454
Enacted transfers:				
Transfer from "Salaries and expenses," EDA to "Salaries and expenses," General Administration			[1]	[60]
To "Operations, research & facilities," NOAA from "Promote and develop fishery products and research pertaining to American fisheries"			...	35,700
Program funded from "Coastal Energy Impact Fund," NOAA to "Operations, research, and facilities," NOAA (reimbursable)			...	8,000
Proposed transfers:				
From "Construction," to "Operation, research and facilities," NOAA			[1]	[...]
Proposed rescissions:				
"Economic development assistance program" EDA			...	-109,200
"Operations and administration," ITA			...	-10,890
"Operations, research and facilities," NOAA			...	-66,604
"Public telecommunications facilities, planning & construction," NTIA			...	-22,800
Other increases:				
Full-year cost in 1987 of positions financed for part year in 1986	...	4,171		
Intermittent benefits	...	67		
Within-grade step increases	...	...		
Restoration of 1986 pay reduction	...	12,710		
Health insurance premiums	...	152		
Federal Insurance Contributions Act (FICA)	...	1,324		
Other personnel benefits	...	145		
Benefits for former personnel	...	387		
Travel and transportation of persons and things	...	38		
Rent payments to GSA	...	7,330		
Communications, utilities, and other rent	...	812		
Federal Telecommunications System	...	259		
Printing and reproduction	...	256		
Other services	...	1,057		
Working capital fund	...	3,564		
Supplies and materials	...	295		
Equipment	...	2,363		
Overseas cost of operations, ITA	...	1,335		
Deficit Reduction Act restoration	...	4,546		
Housing allowances, NOAA	...	153		
Subtotal, other increases			...	40,964
Other decreases:				
Payment to Department of Labor for Employees' Compensation Fund	...	-26		
Management savings	-263	-12,141		
Productivity reviews	-773	-10,632		
Recurring program decreases	...	-100		
NEXRAD decrease (NOAA)	-25	-12,866		

Other non-recurring programs:				
General Administration	...	-992		
International Trade Administration	...	-7,777		
National Oceanic and Atmospheric Administration	...	-6,985		
Patent and Trademark Office	...	-36		
National Bureau of Standards	...	-100		
National Telecommunications and Information Administration	...	-450		
Subtotal, other decreases			-1,061	-52,105
Total, adjustments to base and built-in changes			63	34,690
1987 base			25,252	2,143,024
Program changes			-1,040	-257,694
Total requirements			24,212	1,885,330
Fee collections			...	-131,827
Financing			...	-41,691
Estimated unobligated balance, end of 1986			...	-1,985
Transfers			...	-46,000
1987 appropriation request			24,212	1,663,827

COMPARISON BY BUREAU OF ADJUSTMENTS TO BASE, 1987 ESTIMATE AND PROGRAM CHANGE

(Dollar amounts in thousands)

	Net Adjustments to Base		1987 Base		1987 Estimate		Inc. (+) or Dec. (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
General Administration	1	$5,150	579	$37,450	579	$39,250	...	$1,800
(Economic Development Admin.)	-1	-108,930	399	100,570	250	21,591	-149	-78,979
Bureau of the Census	1,124	69,005	5,108	265,005	5,118	277,230	10	12,225
Economic and Statistical Analysis	...	448	618	30,948	567	31,005	-51	57
International Trade Administration	...	-8,451	2,867	183,549	2,895	179,170	28	-4,379
Minority Business Development Agency	...	369	233	45,369	233	45,369	...	...
United States Travel & Tourism Admin.	...	...	80	12,000	29	4,023	-51	-7,977
National Oceanic and Atmospheric Admin.	-1,013	-46,288	10,029	1,098,661	9,319	906,379	-710	-192,282
Patent and Trademark Office	...	142,447	3,408	227,147	3,401	243,444	-7	16,297
National Bureau of Standards	-45	3,724	1,723	127,709	1,625	123,953	-98	-3,756
National Telecommunications and Information Administration	-3	-22,784	208	14,616	196	13,916	-12	-700
Total requirements	63	34,690	25,252	2,143,024	24,212	1,885,330	-1,040	-257,694
Fee collections					...	-131,827		
Financing					...	-41,691		
Est. Unoblig. Balance, End of 1986					...	-1,985		
Transfers					...	-46,000		
1987 Appropriation Request					24,212	1,663,827		

Authorizing Legislation Required for FY 1987

Appropriation and activity	Existing Authority	Expiration Date	Amount Requested in Budget (in thousands)
Continuing programs:			
Economic and Statistical Analysis:			
Patent license	P.L. 99-73	September 30, 1986	$443
International Trade Administration:			
Operations and administration:			
Defense production Acts Amendment of 1984	P.L. 98-265	September 30, 1986	1,907
National Oceanic and Atmospheric Administration:			
Operations, research, and facilities:			
Deep Seabed Hard Minerals Resources Act	P.L. 98-623	September 30, 1986	1,589
National Ocean Pollution Planning Act	P.L. 96-255	September 30, 1985	3,579
Ocean dumping (MPR & SA, Title II)	P.L. 96-381	September 30, 1982	4,835
National Climate Program	P.L. 96-547	September 30, 1981	1,148
Endangered Species	P.L. 97-304	September 30, 1985	2,775
Estuarine Sanctuaries (CZM)	P.L. 96-464	September 30, 1985	1,259
Program Management (CZM)	P.L. 96-464	September 30, 1985	2,420
Magnuson-FCMA	P.L. 94-265	September 30, 1985	50,210
Marine Fisheries Program Authorization Act	P.L. 98-210	September 30, 1984	37,930
Subtotal, NOAA			105,745
National Bureau of Standards:			
Scientific and technical research and services.	P.L. 99-73	September 30, 1986	123,953
National Telecommunications and Information Administration:			
Salaries and expenses	P.L. 97-259	September 30, 1984	13,916
Subtotal, Continuing programs			245,964
Proposed for later transmittal:			
Minority Business Development Agency:			
Minority business development (SBA)			11,406
National Oceanic and Atmospheric Administration:			
Fishermen's guaranty fund			-1,800
Small Business Administration:			
Salaries and expenses			27,210
Subtotal, Proposed for later transmittal			36,816
Total, Department of Commerce			282,780

Balanced Budget and Emergency Deficit Control Act of 1985
Summary of Amounts Sequestered in 1986
(In thousand of dollars)

	Sequesterable Amounts	Reductions (4.3%)	Total Remaining
General Administration			
Salaries and expenses			
Budget Authority	$32,300	-$1,389	$30,911
Bureau of the Census			
Salaries and expenses			
Budget Authority	90,400	-3,887	86,513
Reimbursements	12,000	-516	11,484
Periodic Censuses and Programs			
Budget Authority	105,600	-4,541	101,059
Economic and Statistical Analysis			
Salaries and expenses			
Budget Authority	30,500	-1,312	29,188
Reimbursements	382	-16	366
Trust Fund (NTIS) Obligations	30,170	-1,297	28,873
Economic Development Administration			
Salaries and expenses			
Budget Authority	26,000	-1,118	24,882
Economic development assistance programs			
Budget Authority	183,500	-7,891	175,609
International Trade Administration			
Operations and administration			
Budget Authority	192,000	-8,256	183,744
Reimbursements	9,242	-397	8,845
Minority Business Development Agency			
Budget Authority	45,000	-1,935	43,065
United States Travel and Tourism Administration			
Budget Authority	12,000	-516	11,484
Reimbursements	935	-40	895
National Oceanic and Atmospheric Administration			
Operations, research, and facilities			
Budget Authority	1,167,767	-50,360	1,117,407
Reimbursements	11,213	-482	10,731
Aviation Weather	28,000	-1,204	26,796
Unobligated balance (CEIF)	8,000	-344	7,656
Fishermen's Contingency Fund			
Budget Authority	750	-32	718
Fishermen's Guaranty Fund			
Budgat Authority	3,000	-129	2,871
Foreign Fishing Observer Fund			
Budget Authority	4,500	-194	4,306
Promote and Develop Fisheries			
Budget Authority	8,007	-344	7,663
Patent and Trademark Office			
Budget Authority	84,700	-3,642	81,058
Reimbursements	119,486	-5,138	114,348
National Bureau of Standards			
Budget Authority	121,883	-5,241	116,642
Working Capital Fund (BA)	2,102	-90	2,012
National Telecommunications and Information Administration			
Salaries and expenses			
Budget Authority	13,400	-576	12,824
Public telecommunications			
Budget Authority	24,000	-1,032	22,968
Total obligational authority			
Budget Authority	2,177,579	-93,782	2,083,797
Reimbursements	181,258	-7,793	173,465
Unobligated Balances	8,000	-344	7,656
Total Reductions, Department of Commerce	2,366,637	-101,919	2,264,918

Summary of 1986 Proposed Rescissions and Deferrals

(Dollar amounts in thousands)

Rescissions	Proposal
Economic Development Administration:	
Economic development assistance	$101,309
A rescission of $101,309,000 is proposed. The effect of the proposal is to transfer responsibility for economic development to private, State, and local sources.	
International Trade Administration:	
Operations and administration	10,180
Funds totaling $10,180,000 for trade adjustment assistance grants and loans are proposed for rescission. U.S. trade laws provide remedies against unfair import competition. Firms harmed by imports should not be entitled to additional special government assistance.	
National Oceanic and Atmospheric Administration:	
Operations, research, and facilities	63,323
Rescissions are proposed for Sea Grant ($28,872,000) and Coastal Zone Management State Grants ($34,451,000). These Federal objectives have been met and their continuation should be supported by State, local, or private sources.	
National Telecommunications and Information Administration:	
Public telecommunications facilities planning and construction	21,820
A rescission of $21,820,000 is proposed to reflect a level of funding consistent with prior year authorizations and appropriations.	
Subtotal, proposed rescissions	196,632

Deferrals	
Economic Development Administration:	
Economic development assistance programs	40,000
A deferral of $40,000,000 is proposed pending a supplemental appropriation request to transfer funds from Economic development assistance programs to provide for administration of close-out activities of grant and loan programs. Of that amount, $21,591,000 is required for 1987.	
Patent and Trademark Office:	
Salaries and expenses	1,977
The funds proposed for deferral are from fee collections which exceed budgetary requirements. The funds will be used in lieu of new budget authority in FY 1987.	
Subtotal, proposed deferrals	41,977
Total proposed rescissions and deferrals	238,609

1986 Supplemental Appropriations Requests

(Dollar amounts in thousands)

The 1987 President's budget transmits the following proposed supplemental appropriations for 1986:

Bureau and Appropriation	Amount Requested
General Administration:	
Grants and loans administration	$40,000
The Grants and Loans Administration's close-out activities 1987-91 will be funded by a reappropriation of $40,000,000 from the 1986 Congressional appropriation for Economic Development Assistance Programs. The Grants and Loans Administration will close out the programs of Economic development assistance, Trade adjustment assistance, NOAA fisheries financial assistance programs, and Public telecommunications facilities. planning, and construction.	

Revised 2/3/86

Budget Authority by Function
(Dollar amounts in thousands)

Function/Program	1985	1986 1/	1987	Change 1986 to 1987
300 NATURAL RESOURCES AND ENVIRONMENT				
306 Other natural resources:				
National Oceanic and Atmospheric Administration...	$1,269,926	$1,058,716	$882,479	$-176,237
370 COMMERCE AND HOUSING CREDIT				
376 Other advancement and regulation of commerce:				
General Administration............................	36,983	30,911	39,250	+8,339
Bureau of the Census..............................	166,259	187,572	277,230	+89,658
Economic and Statistical Analysis.................	30,652	29,188	31,005	+1,817
International Trade Administration................	189,635	173,564	179,170	+5,606
Minority Business Development Agency..............	49,580	43,065	45,369	+2,304
United States Travel and Tourism Administration...	11,532	11,484	4,023	-7,461
National Oceanic and Atmospheric Administration...	29,474	15,902	3,800	-12,102
Patent and Trademark Office.......................	100,159	81,058	109,632	+28,574
National Bureau of Standards......................	123,485	118,654	123,953	+5,299
National Telecommunications and Information Administration................................	13,511	12,824	13,916	+1,092
Total, Commerce and Housing Credit................	751,270	704,222	827,348	+123,126
450 COMMUNITY AND REGIONAL DEVELOPMENT				
452 Area and regional development:				
[Economic Development Administration] 2/..........	259,110	139,182	...	-139,182
500 EDUCATION, TRAINING, EMPLOYMENT, AND SOCIAL SERVICES				
503 Research and general education aids:				
National Telecommunications and Information Administration................................	23,968	1,148	...	-1,148
Subtotal, Federal Funds......................	2,304,274	1,903,268	1,709,827	-193,441
Trust Funds.......................................	58,360	62,005	114,339	+52,334
Offsetting Receipts...............................	-53,649	-95,576	-91,778	+3,798
Subtotal, Department of Commerce..................	2,308,985	1,869,697	1,732,388	-137,309
Proposed for later transmittal:				
370 COMMERCE AND HOUSING CREDIT				
376 Other advancement and regulation of Commerce:				
Minority Business Development Agency..............	...	...	11,406	+11,406
National Oceanic and Atmospheric Administration...	...	...	-1,800	-1,800
Small Business Administration.....................	...	...	27,210	+27,210
Total, Department of Commerce.....................	2,308,985	1,869,697	1,769,204	-100,493

1/ Includes supplementals, rescissions, and balanced budget reductions.
2/ In 1987, becomes part of General Administration.

SUMMARY OF BUDGET AUTHORITY - 1987-1991
(Dollar amounts in millions)

	1987	1988	1989	1990	1991
General Administration	$39	$38	$38	$39	$39
[Economic Development Administration]	...	...	...	...	...
Bureau of the Census	277	363	340	1,234	310
Economic and Statistical Analysis	31	31	31	33	33
International Trade Administration	179	175	178	180	182
Minority Business Development Agency	46	46	46	46	46
United States Travel and Tourism Administration	4	...	...	...	...
National Oceanic and Atmospheric Administration	886	948	935	871	915
Patent and Trademark Office	110	135	126	129	117
National Bureau of Standards	124	123	124	124	121
National Telecommunications and Information Administration	14	14	14	14	15
Subtotal, Federal Funds	1,710	1,873	1,832	2,670	1,778
Trust Funds	114	127	161	153	130
Offsetting Receipts	-91	-98	-99	-101	-103
Subtotal, Department of Commerce	1,733	1,902	1,894	2,722	1,805
Proposed for later transmittal:					
Transfer from Small Business Administration to MBDA	11	11	11	11	11
Transfer of Small Business Administration to Department of Commerce	27	26	26	25	25
Fishermen's Guaranty Fund	-2	...	...	...	...
Total, Department of Commerce	1,769	1,939	1,931	2,758	1,841

SUMMARY OF OUTLAYS - 1987-1991
(Dollar amounts in millions)

	1987	1988	1989	1990	1991
General Administration	$39	$40	$39	$39	$40
[Economic Development Administration]	190	135	68	37	24
Bureau of the Census	246	338	348	942	623
Economic and Statistical Analysis	31	31	31	32	33
Regional Development Program	1	...	...	...	...
International Trade Administration	176	173	177	179	182
Minority Business Development Agency	44	45	46	46	46
United States Travel and Tourism Administration	8	...	...	...	...
National Oceanic and Atmospheric Administration	1,049	1,128	1,033	911	918
Patent and Trademark Office	102	127	128	127	121
National Bureau of Standards	124	123	124	124	121
National Telecommunications and Information Administration	14	14	14	14	15
Subtotal, Federal Funds	2,022	2,154	2,007	2,453	2,122
Trust Funds	114	127	161	153	130
Offsetting Receipts	-92	-98	-99	-101	-103
Subtotal, Department of Commerce	2,045	2,183	2,069	2,505	2,149
Proposed for later transmittal:					
Transfer from Small Business Administration to MBDA	11	11	11	11	11
Transfer of Small Business Administration to Department of Commerce	26	26	26	25	25
Fishermen's Guaranty Fund	-2	...	...	...	...
Fishermen's Vessel and Gear Damage Compensation Fund	-3	...	...	...	...
Total, Department of Commerce	2,077	2,221	2,106	2,541	2,185

NOTE: Detail may not add to totals due to rounding.

Glossary of Terms

Budget Authority

Budget authority for any year represents the authority to incur obligations, requiring either immediate or future payment, which will become available during the year. Appropriations on which the Congress acts are the most common form of budget authority, allowing Federal agencies to make payments out of the Treasury for specified purposes.

Deferral

Any action or inaction by an officer or employee of the United States that temporarily withholds, delays or effectively precludes the obligation or expenditure of budget authority. Deferrals may not extend beyond the end of the fiscal year and may be overturned at any time by either House of Congress.

Federal Funds

Funds collected and used by the Federal Government for the general purposes of the Government. There are four types of Federal fund accounts: the general fund, special funds, public enterprise (revolving) funds, and intragovernmental funds. The major Federal fund is the general fund, which is derived from general taxes and borrowing.

Full-time Equivalent (Workyears) Employment

Compensable workyears for all Federal personnel, calculated by dividing the number of hours funded, to be funded, by 2080.

Offsetting Receipts

Collections deposited in receipt accounts that are offset against budget authority and outlays rather than being counted as budget receipts. These collections are derived from other Government accounts or from Government activities that are of a business-type or market-oriented nature.

Outlays

Obligations incurred under budget authority are generally liquidated by the issuance of checks by the Treasury. Such payments are called outlays. Outlays during any fiscal year may be payments of obligations incurred in prior fiscal years or in the same fiscal year.

Permanent Positions (Perm. Pos.)

Permanent positions are funded positions which are occupied or expected to be occupied by full-time employees with permanent appointments as of September 30 of each year.

Rescission

Enacted legislation canceling budget authority previously provided by the Congress.

Trust Funds

Funds collected and used by the Federal Government for carrying out specific purposes and programs according to terms of a trust agreement or statute, such as the social security and unemployment trust funds. Trust funds are not available for the general purposes of the Government.

DOLLAR DECLINE

Mr. **Smith**. Mr. Secretary, we welcome you again this morning. I think this is the fifth time, that you've testified. I knew that if you stayed on this job long enough, you would be able to come here and say, "Just like I told you in 1982, the dollar is going down in value." [Laughter.]

How much more?

Mr. **Baldrige**. Well, the truest answer to that is, I don't know. We do not have an Administration mark—guideline or goal—for the dollar. We think it ought to go where the market will take it. Essentially, our policy on the dollar right now is not to have a policy.

Now, after having said that, if you ask me my personal opinion, I think it probably has a way yet to go.

Mr. **Smith**. Does it need to go about 10 percent more before we are really competitive in the world markets?

Mr. **Baldrige**. That's what a good many of our businessmen think. Again, as I say, that's not an Administration position, but a good many of our businessmen feel that way. Some economists do. Nobody really knows, though, Mr. Chairman, and we think, obviously, that any too rapid a fall causes us concern. But we're seeing some very strong currents going across the international economy right now—readjustment of currencies and dropping of interest rates and lowering of oil prices, lowering of inflation. Overall, it's of benefit to the global economy, totally, but there's certainly going to be individual countries hurt in this process.

TRADE DEFICIT

Mr. **Smith**. Well, what about the trade deficit? Is it going to come down now or not?

Mr. **Baldrige**. It'll get worse before it gets better. We're in the—or at least we think we're in—that part of the J curve that economists like to talk about where, when there's first a realignment of currencies, the currency that goes down—the price of imports is expected to go up, and therefore slow down. But for a while, imports keep along at the same level except that they are more costly. So it adds up dollars on the import side and makes it look worse for a while.

We should see the trade deficit begin to turn around and go down in the last half of this year. I feel very sure about that; I just don't know what month it will be, but it will be in the last half of this year because of the pressures that the dollar has provided.

INTEREST RATES

Mr. **Smith**. Interest rates have a lot to do with both trade deficits and the value of the dollar; and, of course, interest rates are relative. Our interest rates are going down. There are a good many people that think that they're going down a little more.

Mr. **Baldrige**. Yes, sir.

Mr. **Smith**. In other countries, are their rates going to go down at the same time? Or are ours going to go down more than theirs?

Mr. **Baldrige**. Well, as a result of the G-5 meeting where the other industrialized countries agreed to grow their GNP's faster by noninflationary means—that, in effect, would ensure the kind of coordination that was necessary to raise their currencies relative to the dollar, bring the dollar down. We've seen that happen. We've seen the Germans and the Japanese drop their interest rates. We did, too; we saw them do that after the dollar fell some. In effect, they felt it was the proper part of their policy, both to cure their unemployment problem and increase their GNP, to do it when it was not inflationary, as it has not been. Our interest rates had come down quite a bit, so there's a natural reaction there to defend their own currencies by putting them in proper alignment through macroeconomic means in each country.

I think that we will see a stronger economy as a result, with lower interest rates, in both Germany and Japan. That is going to help our exporters. We will have more growth-markets to export into, and we haven't had that in the past. It will begin to help the developing countries. They have to have more markets to export into if they're going to get out of their debt problem.

So these moves have been very good, Mr. Chairman, and part of it has been growth of the economy abroad; part of it has been reducing the dollar.

STATE OF THE ECONOMY

Mr. **Smith**. You can't blame people for being rather confused when they see what's going on. For years we were told that a $22 billion deficit was driving interest rates through the ceiling. Now we've got a $200 billion deficit and interest rates go down. That's not the way they told us it's supposed to work. Then we see that bankruptcies are higher than ever before and they're going to go higher next year in every area of the country except in Massachusetts, and that they're the highest ever in southern Texas. Then the stock market goes up. Is that the way it's supposed to work?

Mr. **Baldrige**. Well, if you look at business failures last year, they added up to a little less than 60,000 total. You look at new businesses started last year, they added up to a little more than 600,000. Which was the higher? So that ratio is roughly 10 to 1, 10 new businesses starting. Our employment increase—growth in employed people—has come from those kinds of businesses. About 90 percent of the growth in employment has come from businesses employing less than 100 people. It's small business that's doing it.

So I think the market is reacting to that, plus interest rates going down, plus—I think a very strong factor is the realization that set in that either Gramm-Rudman-Hollings or the ghost of Gramm-Rudman-Hollings is going to rule from the grave. I mean, the deficit will be reduced. I think people in financial markets around the world see a sense of determination that that's going to happen. That gives them confidence for the stock market.

Now, the capital flows you mentioned—I mean, the fact that the budget deficit was so high and still interest rates are going down—the movement of capital around the world in today's information society simply has outweighed the consequences of our trade deficit. I mean, it used to be that a trade deficit of the size we had would require automatic currency adjustment; I mean, the dollar would fall. That didn't happen for a long, long time because the movement of capital in the major money markets has been amounting to about, I think, $150 billion a day—far, far greater than any trade flow, and that's because they could get higher real interest rates on their investments, plus security, by investing in the United States.

Now, real interest rates have started to go down; but as other countries have reduced their rates, we are still higher than some countries as far as real interest rates go and we're still a very secure country to invest in, most people think, so I think our budget deficit—for a while—will be financed by the same kinds of investment we've seen in the past.

The thing is, Mr. Chairman, just in closing on that point, we can't count on that forever. I mean, at some time those people who are investing in this market, for one reason or another—one of them being, maybe, better investment someplace else, Germany, Japan, third world, or whatever—may take those funds out. And if that happens, then we will have to raise interest rates in order to attract investment to the United States to cover our budget deficit. That's why it's good to get the deficit down, so we don't have to face that problem.

SBA-TRANSFER

Mr. Smith. How many employees does the Commerce Department have now?

Mr. Baldrige. We have 33,000.

Mr. Smith. You're for reducing the size of Government, I'm sure, aren't you?

Mr. Baldrige. Yes, sir. We've reduced the administrative personnel in Commerce by about 25 percent in the last three years.

Mr. Smith. You just told us there are 10 times as many new businesses getting started as there are folding up, that 90 percent of the new jobs are in small business and there are 33,000 employees in the Commerce Department. Wouldn't it make a lot more sense to fold the Commerce Department into SBA since it's doing such a great job creating new businesses, instead of the other way around?

Mr. Brown. We'll take it either way. [Laughter.]

Mr. Baldrige. I think the Deputy Secretary is right, either way you want to look at it. The SBA program is a good program. The direct loan part of it isn't any good, I don't think.

Mr. Smith. Well, there are hardly any direct loans. That's such a minute part of this SBA that it doesn't amount to anything. Management assistance is the big thing, and bank guarantees.

Mr. Baldrige. I will say, Mr. Chairman, that if the Small Business Administration has a cabinet officer representing them as part of that portfolio, however you work it—whichever you merge into the other—if it's a cabinet officer, those small business problems that are particular to small business really should get more specialized attention. And they would, under cabinet—by being included as a part of a cabinet officer's responsibility simply because he's at all the meetings. I mean, I go to the Economic Policy Committee meetings, the full cabinet meetings, and all kinds of informal meetings. I'm a great supporter of small business. I know where the jobs come from, and I just—I feel it's a stronger management situation for SBA.

TRADE BARRIERS

Mr. **Smith**. Mr. O'Brien.

Mr. **O'Brien**. Thank you, Mr. Chairman.

Mr. Secretary, welcome back.

Mr. **Baldrige**. Yes, sir. Thank you.

Mr. **O'Brien**. Every time I go back to my district I find that problems that I might consider coming under the overall blanket of Commerce don't really appear to be solvable by any really simple, straight-line policy. I have U.S. Steel, to some degree, left in my district, and I have other steel companies. I also have Caterpillar, and I find its interests with respect to imports and how to handle policy with respect to that are very, very different.

It does occur to me, however, to commend you for keeping in touch with those people in my district, the 4th District of Illinois which lies just south of Chicago—it's a horizontal district, running about halfway across the State. Their complaints haven't been as militant lately as maybe they have in the past, so maybe we—meaning you and the rest of us—are doing something right for a change, whether by accident or design, I don't know.

I had a question that I wanted to ask you. It seemed to me that when we come up with an idea that we might think would be good for industry and good for American business, we bump into the word GATT. And obviously, that's been around a while; it's aimed at reducing tariff and non-tariff barriers. There is a suggestion of a new round of talks to do that. What do you think about the possibilities of those talks, and do you see something coming out of them that will improve conditions?

Mr. **Baldrige**. I am hopeful now, more hopeful than I was two years ago or a year ago, that we'll actually not only have a new GATT round but will be able to get some good results from it.

If I could back into your question with one statement, let me say if we didn't have a GATT, Mr. Congressman, things would be a lot worse right now, as imperfect as GATT has been. Our biggest complaint with GATT is that it doesn't have a strong mechanism to settle disputes; I mean, the dispute-settling mechanism goes on and on, and people are not obliged to take the remedies offered, and it's simply not strong enough. When GATT was first set up, they had a companion organization called the International Trade Organization, the ITO, that was supposed to be the tough dispute-settling mechanism, but that ran afoul of feeling in the U.S. Senate—this was right after World War II—and our Senate voted it down. So we never have had a strong dispute-settling mechanism.

Another problem that we simply have to get corrected in GATT is to have them include services. Right now it's just goods, and maybe 30 to 40 percent of world trade is covered in goods. That leaves 60 to 70 percent that isn't covered by any international trading rules—things like telecommunications, financing, banking, insurance—all of that to give our companies a 50/50 break with foreign companies, we should have included. So it is important to get that done. GATT is not perfect, but we should strengthen it and include the parts that aren't included now.

Mr. O'BRIEN. Are you optimistic about it?

Mr. BALDRIGE. Yes, sir. I'm optimistic about it in the same way I was optimistic about our own budget deficit. It'll get fixed up; maybe not perfectly, but a lot better than it is now, simply because it has to be. I mean, that sounds like kind of a simplistic statement, but I think it's true. There's tremendous pressure working on everybody in the international trading system to say we are going to get run over with protectionism, and that'll hurt everybody's economy unless we work out a stronger General Agreement on Tariffs and Trade.

IMPORT ADMINISTRATION

So, yes, I am optimistic we'll get this done.

Mr. O'BRIEN. Just one other thing I wanted to mention. In the Import Administration, you're requesting 55 positions and $2.3 million to meet additional workload demands imposed by the voluntary restraint steel agreements. I assume these resources will be adequate to do the job or you wouldn't be asking for them in those amounts. Is that correct?

Mr. BALDRIGE. Yes, sir. We feel those will be adequate. We had a good many individual case increases in both our dumping and countervailing duty cases. As I mentioned in the testimony, we went from 40 cases in 1980 or 1981 to 140 this last year; and it's very important for our companies to be able to get fast relief—when it's justified—against dumping or subsidies. If it drags on too long, it really hurts them, so we're trying to do that as quickly as we can.

Mr. O'BRIEN. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

PRODUCT LIABILITY

Mr. SMITH. Mr. Early.

Mr. EARLY. Thank you, Mr. Chairman.

Mr. Secretary, I was pleased to read in this morning's paper on the front page about product liability. You've been coming before this Committee for the last four years and we've talked about the problems. But they don't seem to be getting any better. I have a steel company in my district who, just a couple of weeks ago, told me that for $30 million of coverage last year they had a premium of $289,000. This year they're going to pay $10 million coverage for $890,000. To address that I think we need legislation.

Would you comment on the product liability crisis this morning? Are you participating in this?

Mr. BALDRIGE. The Attorney General and I have been very close to this problem and very much interested in getting strong legislation through. So we've been working on it for some time in an interagency group.

The President has not decided on the recommendations he was given, but like a lot of leaking done in Washington, I was very surprised to see that whole cabinet meeting laid out in the newspaper.

Mr. **Early**. And it came from one of the cabinet officials, Mr. Secretary. You can't blame us for that.

Mr. **Baldrige**. No, no. I'm not blaming you, and I'm not sure it came from one of the cabinet. But there are a lot of people running around up there.

But just let me say, we do have a strong plan. The President is reviewing it now. If he approves—when he approves—we will very speedily write up a proposed bill and bring it to the Senate and House as an Administration bill.

This problem is exactly as you described. It's probably even worse; it's just gone up in a rising crescendo in the last six months. There are 30 municipalities in the State of California—and I was just told that it jumped to 50 municipalities in one State—that don't have any liability insurance because they can't afford it. Small businesses are getting eaten up worse than anybody else. It's a terrible situation. It's really part of our job to do something about that because we're not talking about Federalism versus States' rights; we're talking about interstate commerce. And this—because you can make a product in one State, ship it to another one and have it sold there, and have it used in a third State—we've got a patchwork of 50 different States' laws and torts and so forth, and you just have to pick out the worst one—which is probably California—and then kind of model your insurance coverage on that. And it makes us very uncompetitive.

Mr. **Early**. Mr. Secretary, I've got another company, Curtis Marble, they made a piece of machinery in 1916, and they're still getting sued for that piece of machinery. I really think we've been negligent—the Administration and the Congress—in waiting so long. I hope the President does approve the plan immediately. You know, it's a political situation in which there are no winners. Everyone has to give a little. These are always the toughest types of problems to resolve. And that's really where, I think, Mr. Secretary, it's going to take your real drive. We need a solution.

Mr. **Baldrige**. Well I think it's about time the trial bar gave a little, I'll tell you that.

Mr. **Early**. Give a little? They don't give anything, Mr. Secretary. I mean, there are a lot of lawyers on this Committee—I don't want to be critical of lawyers, but I want to be honest. And if you're going to be honest, you have to be critical of lawyers.

But I really hope you come forward with that proposal as quickly as possible, and we get some type of statute of limitations.

OMNIBUS TRADE PROPOSAL

Mr. Secretary, also in this morning's paper on the trade deficit which Chairman Smith spoke to you about. I understand they're looking at an omnibus trade proposal in Ways and Means. Wouldn't it be beneficial if the Administration came forward with some of the things that potentially you can do to correct the trade deficit right now? I mean, all we've tried to do is talk to these countries, and they don't do anything. I know your personal feelings; you've been coming in here year after year. We just see that trade deficit going up and up and our rhetoric is getting weaker and weaker because we're just crying wolf. While they are putting together the best trade proposal, wouldn't it be best if you people implemented some strong sanctions, which you have the authority to do?

Mr. BALDRIGE. Well, with all due respect, Mr. Congressman, we have been. I suppose part of what we should have done is put them all together and explained them more publicly from time to time, but literally, since the President's September 22nd speech last year on trade where he said for the first time we were going to self-initiate 301 cases—which is the strongest trade law we've got on the books—and go after—set up a strike force to go after unfair trade practices, of which I'm the chairman, we have seen somewhere around eight or ten 301 cases that are being settled on terms that are agreeable to us. Insurance in Korea—it isn't settled yet, but I think it will be settled very shortly. Wine, liquor, beer in Taiwan—they heard we were going to put in a 301 and they came and negotiated out the problem before we had to put it in. Dumping—self-initiated dumping cases on 256K RAM's against the Japanese, where we found penalties as high as 100 percent last week, and they're going to have to put up the import bond with that money as of last week.

Mr. EARLY. Those examples are fine, Mr. Secretary. But we have had too many explanations and promises. I mean, it would be better if you were a lot more aggressive in that?

Mr. BALDRIGE. Well, I'm in charge of the strike force to look at unfair trade practices, and I think—for better or worse, my reputation outside of Washington is being perhaps the biggest hawk in the Administration on this. We've got some very good people working on these, Mr. Early, and we are pursuing every bona fide kind of a case we can. We have looked into things like the Airbus, intellectual property rights, recommended strong legislation. We've got counterfeiting, things like that. If you have, for instance, an example of any unfair trade practice, I'd literally like to hear about it because I think we're moving on every one that we can identify that really is an unfair trade practice. Now, some are just free competition, the result of that; but I mean, where there's unfair trade—we're trying to cover all of those.

Mr. EARLY. Well, I think you're moving a little, but my own observation is that if you had your own way, you'd probably move a lot faster and I think everyone would be better for it. I think people would recognize the respect that the business community does have for you throughout the country. I think it would be interpreted that you mean what you say.

Mr. BROWN. Mr. Early, let me just say that when the strike force was formed, the Secretary asked the district offices where the Commerce Department is located all around the country to solicit their District Export Councils—that is, those businessmen that advise those offices—and we got quite a list of potential areas to go after. And what we have done is try to get those put in order as the most important things first; that is, the things that have the biggest dollar return. And we're going after them seriatim.

Mr. EARLY. I think that's the way it should be. All I'm trying to say is, go ahead and go as far as you can. It appears we keep vacillating back and forth.

If it wasn't for the Commerce Department Johnston Steel and Wire in Worcester would be out of business. This Administration has a tendency to suggest that they don't need any help from the Government. But Commerce was super in that case.

COASTAL ZONE MANAGEMENT

I do have problems, Mr. Secretary, with some of the things, that you want to eliminate. Maybe you're half right, but you're going to be half wrong, too, on some things. I'm landlocked in my own district, but the Coastal Zone Management Program is very important to the country. I don't see those services being picked up by the States or private sector. Would you just speak on that a little bit, Mr. Secretary?

Mr. **Baldrige**. Well, we would suggest that they be picked up by the States, not the private sector, Mr. Congressman. That program has provided more than $500 million to the States in the last 11 years, and the States have structures in place right now to deal with coastal issues. And I think the number is 28 Federally-approved Coastal Zone Management Systems—they have been instituted in 28 coastal States and territories, and that covers about 90 percent of the whole coastline of the United States. And the Carter Administration proposed an eight-year phase-down of Federal funding for this program because it was——

Mr. **Early**. Do you think they were right on everything?

Mr. **Baldrige**. Pardon?

Mr. **Early**. You don't think the Carter Administration was right on everything, Mr. Secretary?

Mr. **Baldrige**. On this one, they were. That's the one area I've been able to agree with them on.

But it's a program that was a good program, got the job done, and we don't see any reason to continue it.

Mr. **Early**. I just personally don't think we've got it totally done. I see States like Maine and New Hampshire; they don't have any way to pick it up. Massachusetts also has a problem.

ITC

My final question, Mr. Chairman, to Mr. Brown.

On those 55 new positions in ITA to expand import administrative programs to meet the growing complexity of cases and litigation. How has this impacted on your present caseload and what kind of working relationship do you have with ITA with the ITC?

Mr. **Baldrige**. I think he asked you.

Mr. **Brown**. Oh, I'm sorry.

Mr. **Early**. The working relationship. In other words, with the 55 additional employee request here, but no new employees requested at the ITC. Do they work together?

Mr. **Brown**. Well, the ITC literally gets the cases after we promulgate them, after we start the case through. I'm not sure how the ITC budget fares this year; it's not in our operation.

REPROGRAMMINGS

Mr. **Early**. I see. One final comment.

Do you anticipate reprogrammings? I don't like this 4.3 percent across the board cut, which the law mandates you have to make. I like to see the Secretaries have autonomy to make adjustments. Do you anticipate a lot of reprogramming, Mr. Secretary?

Mr. **Baldrige**. Yes, sir. There are four areas that we are going to ask for reprogramming. We sent them last week to OMB, and we expect they'll be sent to Congress by the end of the month.

ITA, we'd like to transfer $2 million from Trade Administration to the U.S. Foreign Commercial Service because they need the funds in 1986 to avoid furloughing.

NOAA, we'd like to reprogram $9.2 million from across the board, 1986 Congressional add-ons, to avoid an eight-day furlough in the National Weather Service and maintain priority research programs.

And Patent and Trademark, $1.8 million in extra fees to reduce the cutbacks we would have to take otherwise on patent application processing because we think patents are vital to the future of the country, and in processing them quickly.

And Economic Affairs, we'd be asking $300,000 for training technology transfer agents for Federal labs to help transfer Government technology to the private sector.

Those would be the four, Mr. Congressman, that we'd be proposing.

Mr. **Early**. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

TRADE ISSUES

Mr. **Smith**. Mr. Regula.

Mr. **Regula**. Thank you, Mr. Chairman.

Mr. Secretary, we're pleased to have you appear before the committee. I want to say that I've appreciated your aggressiveness, if that's the right word, in the Administration on trade issues. I'm not sure you've always had a sympathetic backup chorus downtown, but I would gather from the news that there's some greater level of interest in the trade issue and it seems to me that it's one that has serious consequences for us.

Do you have a concern about our own companies going offshore? I note that *Business Week* had a feature—cover page and an article—on the "hollow corporation" just a couple weeks ago in which they point out that many companies are really assembling in the United States, but the production of the manhour-intensive things is offshore. And we have the same thing, I believe, with the Japanese automobiles at the Honda plant at Marysville and Nissan in Smyrna, that basically it's an assembly operation and all the labor-intensive units, the drive train and engines, etc., are coming in from overseas. So it's both those plus our own companies going overseas.

Do you see that as a problem? And if so, how do you think we address it?

Mr. **Baldrige**. Well, it certainly is and has been a problem, Mr. Congressman. Just let me comment on the Japanese automobile production in the United States.

We welcome that trend because it provides jobs in the United States. The part of it that's not so good, clearly, is that the Japanese then bring in their satellite plants to supply. That means that our parts suppliers, like our automobile manufacturers, have got to be double tough in their quality so that there's no excuse for U.S. manufacturers of parts as well as automobiles to not get that business. But the Japanese have been very good at moving in satellite plants.

Then we see the effect of our antitrust laws coming into effect there, too. U.S. Steel and National Steel—which is a midwestern steel supplier, was our number six largest company—wanted to merge and they were turned down by the Justice Department. National Steel simply didn't have the funds to invest enough in the future, with their size; so when they were turned down by U.S. Steel—and this is public knowledge—they, in effect, were driven to make another choice. They just couldn't sit there and see their customers go. And they went right to Japan and partnered up with NKK, which is the second-largest Japanese company, and only a couple billion dollars less than U.S. Steel. So now, that installs Japanese competition—not just for the satellite and assembly plants or the main body plant, but for the—you know, the raw materials; not that steel is a raw material, but a commodity like steel—right in the middle of the automobile manufacturing country. I cannot believe that our antitrust laws were set up to force people to merge with the Japanese or the Germans or anybody else outside the country.

But after having said that, we will see the dollar make a dramatic difference in the trend—in slowing the trend abroad, in my opinion. We haven't seen it yet. It has been a serious problem. The economics, the costs were so greatly in favor of companies moving abroad in the last year or two that a great many of them, as a matter of company policy, said, we're going to put all our plants from now on that we can outside the United States. And that was literally happening.

With the dollar's decline, you're going to see a lot of rethinking of that. And I do feel that that has come in time, so that trend is going to be—if not reversed, very, very much slowed down because it will just make more economic sense to do it in the United States.

SERVICE INDUSTRIES

Mr. Regula. You mention the new jobs, some 9 million in three years. Do you have any breakdown—not on the new jobs, but existing ones—as to the manufacturing versus the service industries? Is there a trend toward a much larger growth in service industries——

Mr. Baldrige. Yes.

Mr. Regula [continuing]. Versus manufacturing?

Mr. Baldrige. Yes. Manufacturing over a longer period of time than two or three years has just about held its own. But service has increased greatly, and that's where most of the jobs are coming from.

But then we come into why, you know. Manufacturing is automating in the United States, and that is causing less employment per dollar of output. They simply have to be competitive. We're seeing that in the textile business; a lot of those mills are automating very fully, and that's been part of the reason for some of the loss of textile jobs in the South. On the other hand, we don't—I don't know what comes to your mind when we use the words, "service industry." I think we absolutely need a better definition of services than we have now. We need to divide it up or have it made less broad. I mean, services now can mean anything from a suit pressing shop or a fast food place to a highly complicated, sophisticated telecommunications operation, bank or insurance company, or software company. And they're all lumped together in services. Plus you're seeing—U.S. manufacturers, to reduce cost, are farming out a lot of jobs they used to keep in their own house. You take maintenance or cleanup work or guards or payroll services—a lot of those are being farmed out to specialists in that area which increases the service jobs but decreases the jobs listed under manufacturing.

This is a very complicated area to be positive about the exact numbers involved. But you can be positive about the trend; it is going with the increase in service industries.

TAX POLICY

Mr. **Regula**. Do you see tax policy as affecting our trade balance and/or the impact of either going offshore or staying in the United States? And have you had an opportunity to have any input into the tax reform act?

Mr. **Baldrige**. Yes, sir. We have—I would say that the greatest economic need that we have is for increasing productivity in the United States. We saw, in 1983 and 1984, a tremendous jump in capital spending in this country; 14 percent one year, 15 percent another year. That's about as high as they've been for 20 or 30 years. Then it dropped to, oh, 5 or 6 percent last year, and it'll probably be about the same this year.

This is affected by the tax treatment of corporations, and I think we have to make a decision in the tax bill about the effects—whatever effects there may be, when the dust settles, on productivity and business, because with productivity we're talking about international competitiveness and we're talking about long-term jobs in the United States. And that House Ways and Means bill just rode right over anything that could have helped U.S. business productivity, I guess on the theory that somehow business should pay and still be fine in the future. But we're in a really strong competitive dogfight around the world, and we have to get better than we are now. We are still not good enough at a lot of things, like productivity.

Mr. **Regula**. I'll reserve my questions for the record, the rest of them.

INTERNATIONAL TRADE STRIKE FORCE

Mr. **Dwyer**. You mentioned the International Trade Strike Force in your report. Who are the members of that group?

Mr. **Baldrige**. Commerce is the chairman of the group, and the rest are all members of the interagency group of the various departments. State Department is on it; USTR; Treasury; I'm not sure about—I don't have the list in front of me. I'm not sure about all the—Agriculture and Transportation, yes.

Mr. DWYER. And you're the chairman of the committee, is that it?

Mr. BALDRIGE. Yes, sir.

Mr. DWYER. Has the State Department become more sensitive to all of our trade issues? What have you found since you've been serving on the same committee?

Mr. BALDRIGE. Well, let me put it this way. The State Department does try and help; they don't try and block anything we're trying to do. There hasn't been one thing that I know of that this strike force has recommended that the State Department has blocked. Their job is to look out for what happens in international relations, and I don't fault them for that. But on trade barriers, unfair trade practices, they're supportive. And I'm confident they will be in the future. I think they understand as well as anybody that unfair trade practices really poison the well in international relations, and that without our fair trade laws we wouldn't have any constituency left for free trade with the kind of stresses we've been under. So if somebody's subsidizing or dumping or targeting or doing anything that, really, you can define as an unfair trade practice, it helps the whole free trade system to get after it because otherwise, we'd just be under protectionist quotas.

Mr. DWYER. Does this committee meet on a regular basis?

Mr. BALDRIGE. Yes, sir. The working group meets every other Wednesday; that's the point I wanted to make.

DEBT COLLECTION

Mr. DWYER. In your annual report you spoke to the problem of collecting debts, money that's owed to the Department of Commerce; I think it's $196 million. Is that the outstanding debt at this time?

Mr. BROWN. Well, the fact of the matter is that no Federal agency can be absolutely sure what is owed because we have difficulty drawing a balance sheet on any Federal agency or department. But that's the figure that we see owed by the major programs, our grant programs or our guarantee programs.

Mr. DWYER. Do you have any idea what the outstanding debt might be to your department?

Mr. BROWN. That's the closest figure that we can come to, given the accounting systems that are used in the Federal Government. We've got some money in to try to cure that problem in the Commerce Department because we're a fairly small agency; and with the business background that the Secretary has and that I have, we'd both like to be able to draw a balance sheet on what we really do have out there. But that's the nearest figure that we can give you.

Mr. DWYER. How are the debts collected?

Mr. BROWN. It depends now on the agency. For instance, the Economic Development Administration has its own collection process. There is a proposal for agencies such as that—the Small Business Administration loans and loan guarantees, and our TAA loans and

EDA loans and so forth— that this now be centralized in the 987 budget in a Treasury Department function, where the Treasury would actually collect the debts and take care of selling them off.

OIL PRICES

Mr. Dwyer. Mr. Secretary, what will be the effect on the economy and the rate of inflation if the OPEC countries, who will meet in Geneva this week, make a deal? [Laughter.]

Mr. Baldrige. Well, tell me what the deal is.

Mr. Dwyer. Well, this is a mental exercise. Why don't we start guessing at what type of a deal you would anticipate?

Mr. Baldrige. Well, I would anticipate no deal.

Mr. Dwyer. You would anticipate they'll walk away from that meeting with no agreement?

Mr. Baldrige. Yes.

Mr. Dwyer. Is that a wish, or is that pretty—

Mr. Baldrige. Well, the last three meetings, they've walked away with no deal, so I don't see anything to encourage it. Now, I think there's a lot of political pressure inside OPEC to want to see the price of oil up around $20 a barrel. That's politically—that would be a good goal for them. They certainly don't want to see it down around $8 or $10 or $12. At some point, the market forces that have been driving the oil down will run up against the backbone of the producing nations, but I'm not sure that that point has been reached yet, Mr. Dwyer. That's why I say it's not wishful thinking, but they'd have to get along on bottom and bump along on there for a while before any action they took would have any effect.

So I'm not sure there'll be any action. But let's say that the difference between $25 a barrel oil and $15 a barrel oil, that $10 drop in the global economy would mean—if it was sustained for a year—a one and a half, maybe even a one and a half plus, drop in inflation around the world, and an eight-tenths of a percent—just a little less than a percent—growth in the world GNP. If you went below that, you'd get correspondingly more; but you're talking about very big numbers and you're talking about inflation rates going down close to 2 percent on a sustained series drop, and world GNP going up 1 percent or more. So it's very important to the world, what happens there.

Mr. Dwyer. Undoubtedly. But oil, I think, is at — what, $8 or $9 a barrel this morning, or yesterday? And what if they come out of there with an agreement to bring it up to $15 a barrel? What does that do with our 4 percent estimate in our country for GNP next year?

Mr. Baldrige. Well, that's why I was trying to get into that backwards. Let's say if they ended up at $15 a barrel, I was trying to explain the difference between $25 last year and $15 this year. That would still have the effect I told you—almost three-quarters, eight-tenths of a percent increase in the GNP and a 1.5 percent decrease in inflation. And you know, those are estimates, but that's the best estimate we have.

Mr. Brown. May I take one minute, too?

The $10 drop is equivalent to a $17 billion reduction in our trade deficit because $50 billion of our trade deficit is oil, and that equates out that way. It seems unlikely that the Saudis, who are the driving force in OPEC, are going to want to get everybody to put their price back up for a while because their ambition is, literally, to drive out the strippers in the United States, and also to drive out some of the more expensive finding done by the Brits and the Norwegians in the North Sea and by us, maybe, in Alaska and elsewhere. So the oil prices have to be down for an extended period of time, it seems to me.

Mr. DWYER. What does this do to a country like Mexico?

Mr. BROWN. It's hard on them. And some others.

Mr. BALDRIGE. Mexico, Venezuela, Nigeria are the three worst hit. Indonesia—I mentioned Algeria? Indonesia and Algeria would not be hit as hard as Mexico, Venezuela, and Nigeria because Algeria and Indonesia have better foreign trade balances and less foreign debt. But those five, in total numbers, would be affected the most.

Of course, they are also helped, at the same time, by interest rates going down. It used to be some kind of an offset in the past, but now the oil price drop is having more of an effect negatively on them than the interest rate drop could possibly overcome.

EXPORTS

Mr. DWYER. I had some people come into my office about a week or two ago, and they were really making a suggestion. They export high-tech equipment, and they thought that it takes entirely too long to get approval. And it's really—the reason for it is that the people who have to pass on the export license aren't really up to date on the state of the art. And they were really suggesting that some sort of a seminar on a biannual basis would bring the people who are charged with that responsibility up to snuff on the state of the art so that they really don't have these long delays and maybe lose the sale. Do you have any comment on that?

Mr. BALDRIGE. It's under a COCOM agreement, probably; we do have some unilateral controls, but most of them are under COCOM. That means it has to be reviewed by Commerce and by Defense. Now, I don't know which department, first, they were talking about. We get it and have to process it, and then we have to send it to Defense and get it back. So first, on any particular item, we'd have to figure out where the delay was.

Under the new act, we're forced to do this—both departments—in X amount of time, which I think is a very good idea. And we do have our Free World COCOM Agreement country applications down to—I'm trying to remember—I think it's close to 60 days or less. And if it's a free world item that doesn't have to go to Defense or isn't a COCOM matter, we can do it in less than 10 days. But the high-tech stuff gets involved in some internecine negotiations and arguments about what should and shouldn't go that take longer in that case.

We are using some of our trained lab people in NBS to train our own people. We are training them with industry in some cases. It's a continual training process, so your point is quite right on that. We should continue doing that, Mr. Dwyer.

But overall, it's not where it ought to be yet; but our backlog of cases is down substantially from what it was a few months ago.

Mr. Dwyer. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Mr. Smith Mr. Rogers.

Mr. Rogers. Thank you, Mr. Chairman.

TRADE BARRIERS

Mr. Secretary, it's good to see you again and your very able Deputy Secretary, Bud Brown, our former colleague here.

Mr. Secretary, as much as I applaud and encourage the Section 301's and the other efforts aimed at protecting our market as best we can, and hopefully forcing our trading partners to allow us to trade in their countries as well, would you agree that even if we had complete access to Japan's markets and to Korea and so on, that we would still be way, way in the red, in terms of our trade balance? Is that correct?

Mr. Baldrige. Yes, sir.

Mr. Rogers. You touched upon this earlier in your answers and your testimony. We've got a problem in this country in productivity. We're not making efficiently enough a quality product to beat our competition in the world markets. Is that correct?

Mr. Baldrige. Well, that's correct in too many individual instances, Mr. Congressman, but I want to say, as regards to Japan and Korea and some of the other countries where we have large trade imbalances, where we are competitive or super-competitive—as a matter of fact, where we're ahead of the pack in quality, cost, what have you—we still don't get in. Now, that's two problems. One is trade barriers. We've been working away on that, and in some of the high-tech fields we've got the barriers greatly reduced now. But there still comes that point that you touched on. The Japanese industrial system is built on groups of companies that help each other out—a bank, possibly a steel company, an electronics company, and so forth—and their ingrained buying habits are pretty strong about helping each other out. It's not just a question of not letting the Americans in that much; it's other Japanese groups that don't get in that much. Their system has grown up in a different way, and we're not going to see that trade deficit change by just waiving a wand at it. That has to be a conscious Japanese decision that they will not only remove their barriers, but that it is in their interest, their own self-interest, to buy American and other foreign products when they're competitive.

Mr. Rogers. Are your proposals on the antitrust reforms aimed at allowing American companies to have not the same advantages that a Japanese company may have, but some of the same advantages that companies over there have? That is, to cooperate on research, perhaps marketing research and product research and the like, in ways that are now prohibited by our antitrust laws?

Mr. Baldrige. A good part of that problem was cleared up last year with the National Cooperative Research Act, which allowed joint ventures in research and development. What hasn't been cleared up is that—I'm not talking about these big conglomerate mergers where people say, well, what do you want to change the antitrust laws for? Look at everything that's getting through. Those are conglomerate mergers that aren't even questioned, in most cases, because they don't increase the market share of any one product; you know, they're just two unlike companies getting together.

What we're trying to do is take two companies that are in the same business to some extent, and if one company wants to acquire another one—make an acquisition—if it won't raise—if there isn't a significant probability that the acquired company and the company acquiring it would be able to raise prices above the market level for a sustained amount of time, the merger ought to be allowed because there are some efficiencies that come from horizontal mergers. And too many of the opponents of that get off on the wrong track by talking about these big conglomerate mergers when that's not the point at all.

So that would help if you can get together in some way with people in the same business or an offshoot of your business, combine and become more efficient as a result, maybe get rid of some of your bad operations, be able to build up some of your good ones, increase your R&D because it's on the same kind of product—that would make us more competitive.

DEPARTMENT ON INTERNATIONAL TRADE AND INDUSTRY

Mr. **Rogers**. What is the status of the proposal to create a Department of International Trade and Industry?

Mr. **Baldrige**. The President asked me last year if we wouldn't defer that, at least—obviously, he's not only the boss, but I respect his judgment because there were so many things that we, as an Administration, had to get through in the Congress, and that was a controversial issue. And it was controversial. But I don't know when that could be resurrected again. The rest of the cabinet was against it.

Mr. **Rogers**. Well, I'm very sad to hear that because I think it's something that we're going to have to do and the sooner we get at it, the more chance we're going to have to survive in a very highly competitive world where our competitors have directed economies. And I don't care what anyone says, the Japanese economy is centrally directed. It's not by the government necessarily; it's by Japan, Incorporated, and that's our competition. And I really think that, although we don't want the same thing here, I do think there is a place for a department such as you earlier proposed which wraps into one operation our Trade Representative's operation and the Commerce Department as we now know it, and perhaps even strengthen it more with more market research activities and perhaps other agencies of the Government. I really wish that this Administration would get back on that track. Even though it may cause internal political squeaking, it's something the country, I think, needs.

BUSINESS MANAGEMENT

Let me ask you this. I read recently—a Japanese manufacturer wrote that the problem with the United States and its trade balance was not the old answers we've heard in the past, high labor costs, and expenses such as Social Security, Workman's Comp and unemployment insurance take-outs and the like that drive up price. He thinks it's American management. He raises the question of how Japanese manufacturers can locate a factory in the U.S., using U.S. labor, under U.S. laws, and successfully compete with an American company which locates a factory in Mexico, with both of them for selling back in the U.S.? How come that's so? He says it's because American management has not kept up with state of the art technology in management decisions. Would you have a response to that?

Mr. BALDRIGE. I would certainly have to agree with him in part, anyway, in a good part. First, the Japanese plants, by and large, either make automobiles where their market is pretty assured, or their parts are satellite plants for those automobile plants. That's been the largest number of Japanese plants. They have demonstrated expertise to get in there and do that; it's not like opening a whole new market. But U.S. manufacturers lost the lead in a great many product categories in the 1960's and 1970's—lost the lead in quality. There was no excuse for that. That's not labor; that's not the high dollar; that's not the recession. That's flat out management. And we also lost the ability to lead people on the factory floor to the extent that other countries did. We didn't put our best people down there. You can't get a Harvard or a Stanford Business School graduate to go in on the factory floor. That's where we're getting our lunch eaten, on the factory floor—both quality and cost and new manufacturing techniques. Every bright young American kid that gets out of business school, wants to go up the ivory tower, wear a white shirt and play around with a computer. Not the Japanese or German kids. It's a proud tradition to go out and be able to make something better. We've just got to regain that, because where we're getting beaten is not in marketing, not in use of computers, not in getting financial information fast, for Heaven's sakes; it's in manufacturing. The business schools don't emphasize it enough. Most of the business school professors wouldn't know a factory floor if they saw one.

The companies themselves—I mean, if I was running a company today, literally, to get the brightest people in the top—you know, 5 or 10 percent of the class, I'd pay them more to go down and work on the factory floor, and make sure that they knew that they had a career path that would take them up there and get them up as fast as the guy in the finance department. But we do not see that happening to any great extent today.

Mr. ROGERS. How can we encourage that?

Mr. BALDRIGE. Well, business ought to help itself by paying more money and talking to more people about going down and explaining the opportunities. And some of the businessmen, it would help them to go down on their own factory floor every once in a while. That would be one of the biggest revelations to some I know.

Second, the business schools, I think, have not stepped up to their responsibility in this area and are not training for the real needs of business today. So it's a combination of the two. I can't fault either one of them; it's kind of hand in hand, and part of it is because a lot of our CEO's came up, you know, during the 1960's and 1970's when the hot ticket to getting to run the company was either coming up through the finance route or the marketing route, or long term planning, whatever that means to a lot of companies. But you didn't see anybody from the manufacturing route coming up like there used to be 20 and 30 and 40 and 50 years ago; at least, very few.

Mr. ROGERS. The President of Ford Motor Company recently, I heard say at a breakfast, that in the 1970's we lost the productive advantage overseas. He says now, the intellectual aspect of the business is moving overseas as well. He says, for example, we're contracting with Mazda to do the design work on the Ford automobiles, which is quite a change.

Let me finish up, Mr. Chairman, with a parochial type interest.

COAL EXPORT COMMISSION

Let me congratulate you, Mr. Secretary, and your Deputy Secretary, Bud Brown, for your leadership in the Coal Export Commission, which began its work yesterday under the Congressional act, and we wish for that Commission the very best in its work. I know how interested you have been and are now in coal exports and what that can mean for us, in terms of our balance of trade. And I know from our conversations at the time leading up to the Reagan-Nakasone Joint Policy Statement on Energy Cooperation in November, 1983—I know of your interest in trying to push more coal into Japan and the Far East.

How would you characterize the attitude of the Japanese toward improved implementation of that agreement?

Mr. BALDRIGE. I am trying not to use the word "lousy"——

Mr. ROGERS. Go ahead and use it.

Mr. BALDRIGE.—because the people, the Prime Minister really wants this to work. There's no doubt in my mind about it. But I'll tell you what, if we had about three or four more commissions like that in the energy field, we could break all of our energy companies. That's about what it would take. And when this started, the U.S./Japan Energy Working Group—when we began in November of 1983, we had 30 percent of the Japanese coal market. We started talking and had some very far-ranging talks, and our share of the Japanese market went from 30 percent to 18 percent. Just lately we've had some more talks and in January of 1986 our share is 14 percent. Now, I'm just wondering if we should keep on talking or run away from the talks, because we're having exactly the opposite intent.

Now, the Japanese could import more coal from us. There is no reason for them not to. I don't mean all of our coal is suitable, but enough of it is suitable within our 50 States so that there is no practical reason why they couldn't, and I think that it's been a failure so far and I hope that we can change that around.

Mr. ROGERS. Well, I certainly hope so, too. I don't think, however—not because of anything that you have not done, but I'm not sure that it's getting top billing in places like Japan. And I have to say that I think the State Department has probably been the cause for much of the problem in our negotiating position. And I would hope that we could continue to push this product, particularly in Japan, because it is one that they have nothing of themselves and must buy somewhere. But it's going to take Government action on our part, I think, in conjunction with our private industry in order to get it done. And when the President met with President Nakasone and signed that agreement, which is about as toothless as you can imagine, a lot of us urged that there not be any statement on coal unless it had some teeth in it.

I know you weren't on that trip, but the agreement that was put before the U.S. and Japanese—I assume, drawn by the State Department—bound the Japanese to such things as "hoping" to increase their purchases, and if things improved, we would like to buy more coal. And that's the kind of biting language that was in that "agreement" that was signed, which binds us, and has closed the conversation.

Now, I had hoped that we would not sign anything unless it had some teeth in it, and leave further negotiations for a later date. But nevertheless, we have that joint policy statement, which is meaningless and the Japanese know it and are, in fact, stopping buying American coal and we're powerless to do anything about it because we've got an agreement.

So——

Mr. O'BRIEN. If the gentleman would yield?

Mr. ROGERS. I'll yield.

Mr. O'BRIEN. What would you do, Mr. Secretary—these comments by Mr. Rogers seem to be singularly accurate to me—if you had your way, what would you do to correct that injustice?

Mr. BALDRIGE. I think the time is probably right now, with the imminent meeting between the Prime Minister and the President, to take this particular energy working group and its task and elevate that up to a level of saying that, you know, since we last talked almost, we had 30 percent of your market; after a lot of talking, now we've got 14 percent of your market. And really, we should do something about this. We have to elevate it up to a high enough level to get it done. It's not getting done at the level it is.

Mr. ROGERS. Has that been recommended?

Mr. BALDRIGE. No, but I will.

Mr. ROGERS. Well, Mr. Secretary, and Bud——

Mr. BALDRIGE. I want to say—excuse me, Mr. Congressman—the Coal Commission that we're starting with people from all parts of the industry and labor unions and Government people, I think in there we can make that recommendation very quickly to elevate it without waiting for a year or something, but do it in the next few months.

Mr. O'BRIEN. Would you yield one more time?

Mr. ROGERS. Yes, I'd be happy to yield.

Mr. O'BRIEN. With respect to this particular issue, it is a national issue, and it's very parochial to districts here represented in the Committee before you. I look at my area, which now has an unemployment rate 65 percent above the national average; we'd love to sell the Japanese coal. We really need that kind of help. Mr. Secretary, I think we need your aggressive support of this program, some way, somehow, to get us back in the ball game.

Mr. BALDRIGE. We'll do our best, Mr. Congressman.

Mr. ROGERS. That commission is not due to report until the fall, September or October or thereabouts, as I understand. Is it possible this could happen before——

Mr. BALDRIGE. Yes. We'll do it as quickly as we can.

Mr. BALDRIGE. Good.

Thank you, Mr. Secretary.

COAL MARKET SHARE

Mr. SMITH. Well, why has our market share dropped?

Mr. BALDRIGE. The Japanese—there may be several other reasons, but I think the main reason is that the Japanese have looked on the United States as a swing supplier throughout history, not as a long term supplier with 20-year contracts and 15-year contracts. And now we're saying we really want to be a long term supplier, and the value of the dollar was in such a position that it put us at somewhat of a competitive disadvantage. I think some of that could have been overcome so that we could have kept it, but it wasn't. But I'd say the way they view us is as a short term swing supplier, which we want to change, and so far they've refused to change; and the value of the dollar. Right now, that's gone the other way, so we ought to be able to gèt something done.

BARTER

Mr. SMITH. We are swing suppliers in a lot of things because barter is beneath us. I know you'd be disappointed if I didn't bring up barter again. [Laughter.]

Mr. BALDRIGE. I was waiting, Mr. Chairman.

Mr. SMITH. That's beneath us. We've got to deal with banks, you know, and money; things like that.

If they have an agreement to trade a certain number of their resources for a certain number of units of somebody else's resources, they're going to fulfill that agreement first.

Mr. BALDRIGE. That's right.

Mr. SMITH. Isn't that involved in this?

Mr. BALDRIGE. Yes. They have long-term contracts with the Australians, the South Africans, and I think Indonesia, too. When I say long term, I'm talking about 10 years, 15 years, and so forth.

Mr. ROGERS. And they're developing their own mines in China, are they not?

Mr. BALDRIGE. Yes. And we don't have any truly long range contracts. Even where our coal is competitive, acceptable quality—good quality—and it's certainly one way to get at this trade deficit.

SULFUR CONTENT

Mr. SMITH. Is the sulfur content involved in this?

Mr. BALDRIGE. Yes, sir. I mean, the sulfur content is all right. For instance—I'm not familiar with all of the coal in the Congressman's district, but I did see some Alaskan coal analyses, and the sulfur content was below 1 percent. As a matter of fact, I think it was below a half of 1 percent.

Mr. SMITH. Well, that's true in Wyoming and Montana and up to Alaska, but down in the Appalachian Mountains it's mostly in the 2 to 3 percent range.

Mr. ROGERS. Well, no, it's not. There is high sulfur coal in the Illinois basin, but in the Appalachian area, including my district, it's primarily low sulfur.

Mr. SMITH. Below 1 percent?

Mr. ROGERS. Well, it's about 1 percent.

Mr. SMITH. About 1 percent.

BARTER DEALS

We've got to encourage private businesses to make barter deals or three- or four-way deals with some of these countries. The authority is there to do it, but I don't see much encouragement to them to do it. They ought to do it on their own and they ought to know that it's good for their business. The authority has been there since 1977 when I got that amendment in to waive for up to 20 years the right to have an embargo apply to a product that was in an approved contract. It just seems to me that we're losing out more and more all the time when you've got over 30 percent of the world's product now moving under some kind of a barter arrangement.

Mr. BALDRIGE. Well, don't you think that is up to the businessmen involved, though?

Mr. SMITH. It is, but I think Government can facilitate it. For example, with grain, there are ways the Commodity Credit Corporation can facilitate private businesses making a deal. When I say private businesses, one person I think I told you about before was an executive in a steel company. He said, "I would love to have a contract that assured me for a five-year period that I'm going to get a certain amount of my product from Brazil, raw iron ore." And he said, "There's less risk for me taking my chances on the price of wheat that I would trade than there is on the price and supply of iron ore."

I think there are ways that Government can facilitate this, and I just don't think that we've done it. In the end it's got to be the private business that trades with them. One thing is true. The Japanese are still burned up about that soybean embargo. When they couldn't buy, regardless of the price—they were willing to pay the price, but we wouldn't sell them soybeans. They depended on soybeans. I think they need some encouragement.

TRADE ADJUSTMENT ASSISTANCE

I noticed that you mentioned trade assistance. That authorization is in the reconciliation bill. That's under consideration in the Senate this week, I guess.

Mr. **Baldrige.** Yes. I think that reconciliation bill is approved by the Administration. So I guess that would be part of the package. You know we've been against that Trade Adjustment Assistance—not because we don't want to help companies, but because it hasn't worked, Mr. Chairman. Five percent of those companies never make it, and that's throwing pretty good money down——

Mr. **Smith.** Did I understand that you're supporting the bill?

Mr. **Baldrige.** The reconciliation.

Mr. **Smith.** I didn't think you'd signed off on it yet.

Mr. **Baldrige.** Yes. It passed the Senate last week. It's in the House this week, and then the Administration will have to approve it or veto it, I guess.

Mr. **Smith.** We passed it in the House, but they've got to go to conference.

Mr. **Baldrige.** I'd better not get my foot around my neck about what the Administration will do. That was just a good guess.

SATELLITE COMMERCIALIZATION

Mr. **Smith.** You were the one that pushed the satellite commercialization venture. What's the status of that?

Mr. **Baldrige.** I'd like to have the Administrator of NOAA, Tony Calio, answer that. He's right close to it, if I may, Mr. Chairman.

Mr. **Calio.** Mr. Chairman, right now we've entered into discussions with Eosat, both Hughes and RCA, and have developed a proposal to work within the Administration guidelines and also within the legislation that's been passed. That proposal is now before the Department for their review, and if it meets with their approval it will then go to OMB and be brought here to the Congress for your consideration.

Mr. **Smith.** Do you not need any funds to complete this?

Mr. **Calio.** Well, that's part of the proposal package that we're putting together, and it's sort of proprietary discussions that we've had, both with RCA, Hughes, and Eosat, and we're in the process of putting that entire package together right now.

Mr. **Smith.** Then you don't have a request in the budget to complete it. What would you have to do?

Mr. **Calio.** As my Deputy Secretary says, try to make the best deal we can, and that's what we're trying to do. We're trying to live within the budgetary framework.

Mr. **Smith.** It wouldn't take any money to complete it, then?

Mr. **Brown.** Mr. Calio is a pretty good negotiator, but he also is very circumspect. Let's hope for the best.

Mr. **Calio.** We hope to stay within our budget, and we hope to accomplish the objectives. That proposal is now being reviewed, and we have worked an arrangement—or a working arrangement—with both Hughes and RCA, and it's going through the approval cycle now and should be up to you very shortly.

Mr. **Smith.** What's fairly shortly?

Mr. **Calio.** I would say in about two or three weeks.

Mr. **Smith**. Everything is within the parameters that were laid out by the agreements that were made?

Mr. **Calio**. We believe they're going to be pretty close, if not exactly on.

Mr. **Smith**. Mr. Dwyer, any other questions?

Mr. **Dwyer**. No questions.

Mr. **Brown**. Mr. Chairman.

Mr. **Smith**. Yes.

EXPORT LICENSES

Mr. **Brown**. We do have some figures for Mr. Dwyer that the Secretary didn't have available when you asked him the question.

On the free world export license applications, in 1985 the average processing time was 21 days. The statutory time limits prior to July 1985 were 90 days; now they're 60 days, and in 1985, 96 percent of those export license applications were processed within that statutory limitation of time.

The total applications received that year were 118,000. In 1986, the average time is up one day to 22 days; the statutory time limits are 60 days. Again, 96 percent so far of the licenses have been processed within that statutory time limit. Over the winter months we've had a reduction— that is, from October 1st, 1985 to February 28th, 1986— we've had a 13 percent decrease on an annualized basis of license applications. They are at 42,700 for that period of time, and that's probably owed in greatest part to the fact that the low level technology licenses have been scrubbed from the books. In other words, there has been a decontrol of some of those licenses required, so we have less licenses being applied for but they are more sophisticated licenses as a result of the decontrol, and we're holding to the time frame.

Mr. **Dwyer**. Thank you very much.

Mr. **Smith**. Thank you, Mr. Secretary.

Mr. **Baldrige**. Thank you very much, Mr. Chairman.

[Questions for the record follow:]

QUESTIONS FOR THE RECORD BY CONGRESSMAN SMITH

GPO Commercial Procurements for Printing and Electronic Publishing

QUESTION:

We are aware that the Public Printer, at the Government Printing Office, has certain initiatives to encourage Federal agencies to take maximum advantage of GPO commercial procurement contracts. Also, the new GPO electronic publishing procurements are now saving very substantial tax dollars. We would like to know what plans you may have to increase your reliance on GPO commercial procurements for both printing and electronic publishing.

ANSWER:

We will continue to work closely with the Government Printing Office (GPO) in the procurements of both printing and electronic publishing. We presently have 57 contracts with GPO. Whenever new publications series are developed, GPO contracts are utilized. The Department's Office of Publications provides its bureaus with electronic publishing services. We offer developmental/pre-planning assistance for electronic publishing and use GPO's resources for high volume production.

We are currently studying a proposal for an exemption from Title 44 for the National Technical Information Service (NTIS). This exemption would allow NTIS to compare costs and services available from GPO and other private vendors, and to improve NTIS' ability to offer quality services to its customers.

Questions for the Record by Congressman Boland

International Trade Administration

QUESTION:

Mr. Secretary, as you know, the mammoth trade deficits being recorded by the United States are the cause of much concern, both inside and outside of government. Four factors are routinely cited as primary contributors to the trade deficit: the value of the dollar, debt problems in less developed countries, lower wage scales overseas, and unfair foreign trade barriers or practices. Please give the subcommittee your assessment of the percentage of the trade deficit caused by each factor, and what steps the Congress might take to bring some relief in each area.

ANSWER:

The value of the dollar, stronger U.S. economic growth than abroad, and LDC debt problems have been generally perceived as among the principal "causes" of the U.S. trade deficits. In a broader sense, however, they are outgrowths of international capital flows, rather than the underlying causes of the deficits.

In the current international economic environment, most countries' current account and trade balances are determined fundamentally by international capital flows. Net inflows of capital result in current account deficits; net outflows produce current account surpluses. The direction and size of a nation's capital flows are determined in large part by national and international macroeconomic conditions and by a nation's domestic investment and saving behavior. Political and non-economic factors also play a role.

In recent years, U.S private sector investment plus the U.S. Federal deficit have been significantly greater than domestic saving. The gap has been filled by large net inflows of foreign capital. This net inflow represents foreign investment in the United States and is the mirror image of the U.S. current account deficit. Absent the Federal government deficit, U.S. private saving would have been more than enough to meet U.S. investment needs, the net foreign capital inflows and the accompanying current account and trade deficits would not have occurred, and the dollar exchange rate would probably have been lower.

Foreign trade restrictions and competitiveness factors (such as low wages in some countries) have not been major factors in the recent trade deficits. This is not to say, however, that they are not significant factors. Even if our trading partners accepted every U.S. trading concession requested, the impact upon the total U.S. trade deficit would not be great. The U.S. deficit has only significantly worsened during the past three years, but many trade restrictions and competitiveness factors have been in force much longer. Moreover, in such areas as steel and textiles and apparel, the United States has introduced its own trade restrictions to limit U.S. imports, with effects on the trade deficit.

Assessments of the portion of the total trade deficit due to the factors cited above are problematical and of limited usefulness since, in a sense, they address symptoms rather than the underlying causes of the trade deficit. Estimates, however, of the contribution of the strong dollar range from about one-half to as much as three-fourths of the growth in the deficit since 1980. In addition, estimates of the effects of the LDC debt crisis range from 15 to 25 percent.

The large U.S. current account and trade deficits will continue as long as there is a large net inflow of foreign capital--as long as private sector investment plus the government deficit is greater than U.S. saving. A reduction in domestic investment might reduce net capital inflows and the trade deficit despite large Federal budget deficits. But this is a "solution" no one should want because it eases the trade deficit at the expense of domestic economic growth and employment. Private saving could be stimulated, but it would be preferable to have those savings contribute to a stronger economy rather than toward financing even large Federal budget deficits.

The only realistic approach to reducing foreign capital inflows and the continued growth of the trade deficit is to lower our Federal spending and and budget deficits substantially. In fact, our trade deficit could be dramatically reduced if the Federal budget deficit were sliced significantly. This is the greatest area for the Congress to play a role in reducing the trade deficit.

The President's budget for fiscal 1987 meets the deficit reduction target set out in Gramm-Rudman-Hollings. In doing so it can contribute to the reduction of the U.S. trade deficit. I urge your support for the President's budget and final completion of this year's work on tax reform along the lines of the President's proposal.

I also urge your support for Administration attempts to persuade our trading partners to adopt measures to boost their growth. The large net inflows of capital in recent years are related to the relatively poorer performance of foreign economies compared to that in the United States. European growth has been mediocre at best. Japan, on the other hand, has relied on exports to boost domestic growth. We want the Japanese to reduce their reliance on trade surpluses for economic growth by increased domestic opportunities.

Management of LDC debt problems must also complement actions to reduce the trade deficit. Secretary Baker's plan for LDC debt adjustment has emphasized strengthened economic growth policies in those countries and greater public and private lending and investing to facilitate their recovery. It deserves the full support of the Congress. I understand some members of Congress have recently suggested slashing funds for the World Bank and other multilateral development banks. Such cuts would jeopardize the Administration efforts to place more of the burden of financing debtor country adjustment and recoveries on multilateral lending agencies.

I also seek congressional support for legislation that would help us promote free and fair trade. These include revisions to our laws protecting intellectual property, export promotion initiatives and various amendments to our antidumping and countervailing duty laws. The Administration has also proposed significant reforms in the antitrust laws that will enhance the international competitiveness of U.S. firms.

Finally, I urge Congress to support the Administration efforts to launch a new round of multilateral trade negotiations. It is imperative that a new round be launched in the coming months to achieve fairer trade, improve access for exports, provide more effective dispute resolution, and strengthen the fabric of the international trading system.

We look forward to working with the Congress in a constructive way on these issues.

QUESTION:

In your testimony last month before the House Foreign Affairs Committee you were quoted as follows: "This administration is working hard to safeguard the continued growth of the international trading community and to ensure that American goods and services get a fair shake abroad." What specific actions did you take in calendar year 1985 to ensure that American products receive equitable treatment in the marketplace? What specific actions have you taken, or do you have planned for 1986?

ANSWER:

The Administration took numerous actions in 1985 to ensure that American goods and services receive equitable treatment in foreign markets. Among the most noteworthy actions we have:

o Secured agreement of our GATT trading partners to establish a preparatory committee for a new round of multilateral trade negotiations. We expect the round to be launched at a meeting of trade ministers scheduled for September 1986.

o Reached agreement on a free trade area with Israel.

o Welcomed Canada's initiative for a possible bilateral free trade arrangement.

o Taken the unprecedented step of self-initiating Section 301 unfair trade cases. These cases involve:

-- Brazilian informatics market and investment restrictions;
-- Korean fire and life insurance market restrictions;
-- Japanese market restrictions on tobacco products;
-- Korean lack of protection for intellectual property rights.

- Achieved a negotiated resolution on the issue of Japan's market restrictions on leather and leather footwear. Japan agreed to compensation through reduced tariffs worth $236 million in increased market access and the U.S. will impose prohibitive tariffs on $24 million of Japanese leather exports to the U.S.

- Introduced a GATT Subsidies Code case against European Community wheat export subsidies.

- Secured market-opening concessions from Taiwan on tobacco, wine, and beer in response to the threat of a 301 case.

- Created the President's Strike Force on Trade last September to identify unfair practices and recommend strategies to deal with them. A number of Administration actions have or will take place shortly as a result of formal Strike Force recommendations. These include:

  - Self-Initiation of an antidumping investigation against the sale of 256K DRAM semiconductors to Japan last December. This action marks the first time that the Administration has initiated a dumping investigation (with the exception of cases related to the steel trigger price mechanism). Affirmative preliminary dumping margins were announced 75 days before the statutory deadline and a final determination is expected May 27.

  - Special consultations to begin in March with European governments on the subject of government support for Airbus.

  - Proposed legislation to strengthen and expand protection of intellectual property rights and adoption of a formal policy on the enforcement of intellectual property rights.

  The Strike Force has also been a catalyst for action in some cases without ever having to make any formal recommendations. Focusing high level attention on critical issues is often sufficient to get action going within the Government or with other countries.

- Negotiated resolution of the EC canned fruit case, obtaining an EC commitment to reduce its production subsidy by 25 percent by July 1986 and eliminate it entirely by July 1987.

- Following the failure of the U.S. and EC to reach a solution on the citrus problem by the agreed October 31 deadline, on November 1 the U.S. imposed duties of 40 percent ad valorem on EC-origin pasta products not containing egg and 25 percent ad valorem on EC pasta containing egg. We have, however, continued to discuss this case with the EC and would prefer a negotiated solution which would enable us to put this case behind us.

- Signed an agreement with Japan on the elimination of tariffs on computer equipment and parts and with Canada on the elimination of tariffs on computer parts and semiconductors.

- o Countered foreign subsidized agricultural exports by concluding sales under the Export Enhancement Program valued at over $260 million.

- o Countered foreign subsidized export financing. Pending Congressional acceptance of the President's War Chest proposal, the Export-Import Bank has offered grants to help American companies win sales worth about $315 million in nine pending overseas contracts. By aggressively using mixed credits, we hope to persuade our trading competitors, particularly France, Italy and Belgium, to support negotiations to eliminate predatory financing practices.

- o Successfully negotiated modifications to Japanese practices in the medical/pharmaceutical industry and the telecommunications industry as part of the MOSS process. To continue this process of gaining greater market access for American products, the Administration is currently negotiating additional sectors for future MOSS talks with the Japanese Government.

We are continuing these vigorous efforts to open foreign markets in 1986. The preparations for and launching of the new trade round is receiving high priority. We have identified for new round discussion a number of areas in which increased international discipline would facilitate U.S. trade in goods and services and U.S. investment abroad. We will seek liberalization of the Canadian market in bilateral free trade area talks. We are also committed to continue using our trade laws, GATT dispute settlement and competitive export financing to ensure that American goods and services receive equitable treatment in foreign markets.

QUESTION:

The concept of reciprocity as a guiding principle of trade policy has some supporters in Congress. What is your evaluation of that principle?

ANSWER:

We have long embraced the principle of reciprocity in negotiations with our trading partners to reduce barriers. That is, on balance, we seek to gain access to foreign markets equal to that which we offer.

QUESTION:

You have been an advocate of changes in our anti-trust laws which would facilitate mergers to enhance international competitiveness. Can you cite any specific examples of firms that were not competitive in international trade, wanted to merge to address that shortcoming, and were prevented from doing so by our current anti-trust laws?

ANSWER:

Ten years ago, section 7 certainly stopped mergers. As a businessman, I can tell you that we never even considered mergers as an option. We have no way of measuring these lost opportunities.

Today's enforcement of Section 7 under the Department of Justice's Merger Guidelines makes more sense. But a business is still at risk. Courts and private parties don't have to abide by the reasonable approach of the Guidelines. Competitors may use Section 7 to block a harmless merger because the standard written in the law is so vague. I have proposed codifying the best principles of present enforcement. Then business will have the clarity and certainty it needs to attempt procompetitive mergers.

QUESTION:

I note that the Administration is once again proposing the elimination of the Trade Adjustment Assistance program. In light of the continued belief by Congress that this program can be of assistance to businesses threatened by imports, are there not some changes in the program or its administration which could be made to address the shortcomings you see in it?

ANSWER:

The Trade Adjustment Assistance program has had only isolated successes. Several new and improved policies were implemented to improve overall program performance since its transfer to ITA. We have experimented with some changes like tightening loan standards and using Trade Adjustment Assistance Centers to deliver program assistance. However, statistics for the loan portion of the program yield a 47 percent default rate. Based on EDA experience with Trade Act loans, it is likely that the failure rate will grow rather than level off.

This program singles out for assistance firms impacted by imports, although, in general some firms suffer far more seriously from other problems such as bad management, changes in consumer tastes, product obsolescence, etc. for which the Trade Adjustment Assistance program cannot provide any meaningful relief.

Also, firms suffering from unfair trade practices have available other forms of relief. The trade adjustment assistance program raises false expectations among businesses that government intervention in the management of private sector firms can rectify competitive disadvantages.

QUESTION:

I support the expeditious development of the NEXRAD system as a means to improve weather forecasting and to improve air traffic safety. I am concerned with the proposed transfer of financing to the FAA Airport and Airway Trust Fund. What were the reasons for this proposal and what is it intended to accomplish?

ANSWER:

The proposal to finance the NWS share of NEXRAD from the FAA Airport and Airway Trust Fund is based on three factors: the primary use for the radar data; the NEXRAD system requirements; and the siting criteria for locating the radars.

A primary use of NEXRAD data will be in preparing aviation weather warnings and forecasts to help improve air safety, although the data will also be used in general public warnings and forecasts. Also, the NEXRAD system requirements and location of the radars are related to aviation weather forecasting requirements.

The intention of the proposal is to have a portion of the NEXRAD program funded from the fees collected from the aviation industry and users of the national airspace system because of the strong relationship of the NEXRAD radar network to aviation weather forecasting requirements.

Questions for the Record by Congressman Regula

International Trade Administration

QUESTION:

I am pleased that the Commerce Department has come out with a preliminary ruling that the Japanese are dumping semiconductors in the U.S. at prices far below competition. What is the status of these cases and the related 301 investigation?

ANSWER:

Commerce has issued preliminary determinations of sales at less than fair value (dumping) in each of its antidumping investigations covering semiconductor products from Japan. We are in the process of completing these cases with our final determinations due by April 23 in the 64K DRAM case and May 27 for both the EPROM and 256K DRAM cases.

If our final determinations are affirmative, and the International Trade Commission's final injury determinations are affirmative, then we will issue an antidumping duty order requiring a cash deposit on all entries of these products from Japan.

The United States Trade Representative's Office is currently leading negotiations for a settlement of the Section 301 investigation, which although dealing with semiconductors, is separate from the antidumping cases. That case was filed by the U.S. industry alleging that their access to the Japanese market has been denied and that the Japanese producers practice predatory pricing.

QUESTION:

The Washington Post carried a story on March 11, 1986, about the Japanese edge on technology for SDI (Star Wars). The article noted the Pentagon's concern about such heavy reliance on a foreign source for our defense needs. Many people share this concern, not only with technology for Star Wars, but also for the demise of the domestic production of many components of our national defense, such as steel. Knowing of the President's unshakable support for a strong defense, has the tie between America's defensive capabilities and the American steel industry been duly noted within the Administration? How does the Administration justify the conflicting signals of a strong defense effort with the slow reactions to foreign trading practices which are crippling America's ability to retain its defense industrial base?

ANSWER:

The Administration monitors the production capabilities of all critical raw material and manufacturing industries, including the steel industry, to determine whether defense-related requirements can be met in peacetime and in a national emergency. Domestic steel production overall is sufficient to meet national security needs. The 18 voluntary restraint agreements on imports that we have signed with our major steel trading partners have successfully reduced import levels, thus providing the domestic industry a breathing period in which to modernize, restructure, and adjust to international competition. Fourth quarter 1985 imports of total basic steel mill products from countries covered by the agreements fell 23 percent from 1984. Moreover, fourth quarter import penetration of total basic steel mill products from all countries fell from 28.4 percent in 1984 to 22.7 percent in 1985. In addition, a 1985 Commerce Department study of the steel plate industry concluded that production capacity for this vital specialty item was sufficient to meet defense requirements.

QUESTION:

As you know, trade legislation is in the works in the Ways and Means Committee. I noted in today's Post that Commerce recently held talks with the Europeans about their market restrictions to U.S. telecommunications products. What progress can we expect from these talks? Do you think that legislation will need to address the telecommunications issue, or can these talks resolve the problem of closed European markets effectively?

ANSWER:

We have held two rounds of fact-finding discussions with the Germans and will hold the first round of talks with the Italians April 21-22. We are seeking to obtain information about practices, policies, and regulations that govern (1) the supply of telecommunications equipment to these markets and (2) the provision of enhanced services by private operators. We are considering similar talks with other European countries and the EC Commission. These discussions are designed to give us the basis for conclusions as to the degree to which U.S. firms have fair and equitable access to European markets. Once we arrive at conclusions, we will then determine what actions are needed to achieve such access including the possibility of specific trade legislation. We believe that the Administrations's strategy is most likely to achieve results. This strategy consists of three elements: obtaining specific information on barriers to U.S. exports; negotiating removal of trade barriers and improvements in the trading system; and promoting exports in developing markets.

FRIDAY, MARCH 21, 1986.

GENERAL ADMINISTRATION

WITNESSES

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION
SHERMAN M. FUNK, INSPECTOR GENERAL
CORA BEEBE, DIRECTOR FOR PLANNING, BUDGET AND EVALUATION
MARVIN E. WHITEHEAD, DIRECTOR, OFFICE OF BUDGET OPERATIONS
MARK BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. This morning we begin with the General Administration Account for the Department of Commerce. Here to testify is the Hon. Katherine Bulow, Assistant Secretary for Administration.

The fiscal 1987 request is $39,250,000. That represents an increase of $8,039,000 above the adjusted 1986 level.

[The justifications follow:]

DEPARTMENT OF COMMERCE
GENERAL ADMINISTRATION

BUDGET ESTIMATES, FISCAL YEAR 1987
Congressional Submission

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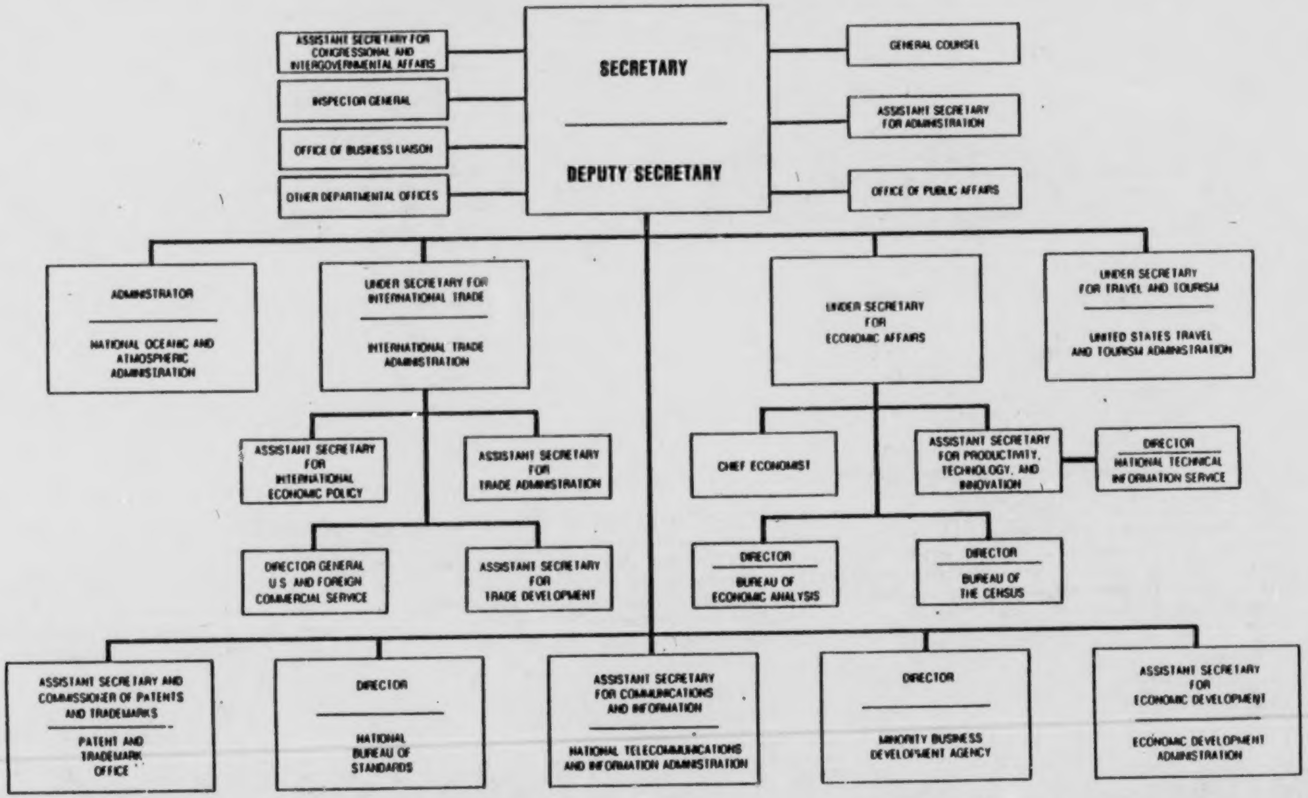
U.S. DEPARTMENT OF COMMERCE


SECRETARY
DEPUTY SECRETARY
ASSISTANT SECRETARY FOR CONGRESSIONAL AND INTERGOVERNMENTAL AFFAIRS
INSPECTOR GENERAL
OFFICE OF BUSINESS LIAISON
OTHER DEPARTMENTAL OFFICES
GENERAL COUNSEL
ASSISTANT SECRETARY FOR ADMINISTRATION
OFFICE OF PUBLIC AFFAIRS
ADMINISTRATOR
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
UNDER SECRETARY FOR INTERNATIONAL TRADE
INTERNATIONAL TRADE ADMINISTRATION
UNDER SECRETARY FOR ECONOMIC AFFAIRS
UNDER SECRETARY FOR TRAVEL AND TOURISM
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION
ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
ASSISTANT SECRETARY FOR TRADE ADMINISTRATION
DIRECTOR GENERAL U.S. AND FOREIGN COMMERCIAL SERVICE
ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
CHIEF ECONOMIST
ASSISTANT SECRETARY FOR PRODUCTIVITY, TECHNOLOGY, AND INNOVATION
DIRECTOR
NATIONAL TECHNICAL INFORMATION SERVICE
DIRECTOR
BUREAU OF ECONOMIC ANALYSIS
DIRECTOR
BUREAU OF THE CENSUS
ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
PATENT AND TRADEMARK OFFICE
DIRECTOR
NATIONAL BUREAU OF STANDARDS
ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
DIRECTOR
MINORITY BUSINESS DEVELOPMENT AGENCY
ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
ECONOMIC DEVELOPMENT ADMINISTRATION

General Statement

The mission of the Department of Commerce is "to foster, promote and develop the foreign and domestic commerce...of the United States." This mission has evolved, as a result of legislative and administrative additions, to encompass the responsibility to foster, serve and promote the Nation's economic development and technological advancement. The Department seeks to fulfill this mission by: increasing America's competitiveness in the world economy through expanded export opportunities for U.S. businesses; stimulating economic recovery and growth through the promotion of private sector capital formation, job creation, productivity, reduced regulatory and administrative barriers, useful economic forecasts and industry analysis; managing effectively the oceanic and atmospheric resources of the Nation to achieve a balance between the protection of the environment and the harnessing of its resources for man's benefit; and having the best managed Department in the Federal Government.

A comparison of the 1986 appropriation and 1987 estimate, permanent positions, and related data on current employment is shown below:

(Dollar amounts in thousands)

Appropriation	1986 Appropriation Currently Available		1987 Estimate		Inc. (+) or Dec. (-)		Permanent Emp. as of 12/85
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Salaries and expenses..................	578	$ 32,300	579	$ 39,250	+1	+$6,950	581

The specific functions and programs of the Department that make up these broad activities are authorized by the Department's Organic Act (Act of February 14, 1903, 32 Stat. 825) and by other legislation. They also include responsibilities transferred from other agencies by Presidential Reorganization Plans, as well as responsibilities assigned to the Secretary of Commerce or the Department by Executive Order or other actions of the President. The general administration of the functions and authorities of the Department is vested in the Secretary of Commerce. Overall policy direction of the eleven operating bureaus is exercised through the Secretary, the Deputy Secretary, and the various Secretarial officers.

Significant improvements in the management and operation of the Department are evident in this budget. Among the improvements the Department will pursue in FY 1987 are:

- The continued development of governmentwide standards for Business Loan Credit Approval as part of the Reform '88 initiatives.
- The continued improvement of Departmental Cash and Debt Management Plans.
- The provision of uniform Departmental procurement systems to simplify and make less expensive the acquisition of goods and services.
- The further enhancement of the Department's decision-making capabilities through an improved Strategic Planning/Budget Linkage system supported by an expanded financial and management information system.

Appropriation Summary Statement

Appropriation: Salaries and expenses

The appropriation "Salaries and expenses" provides for the executive direction of the Department of Commerce; for departmental staff services necessary for management and administration, including such functions as budget, planning, program evaluation, Congressional relations, public information, legal services, organization and management studies, personnel, systems, publications, and security; and for the audit, investigative, planning, evaluation and inspections duties of the Inspector General.

These functions, also referred to as the Office of the Secretary, provide for the general management of the Department and the principal support to the Secretary in formulating policy and providing advice to the President. The office provides program leadership for the Department's responsibilities and exercises general supervision over the operating units. It also directly carries out program functions as may be assigned by the Secretary, and provides, when determined to be more economical or efficient, administrative and other support services for designated operating units.

The budget request for "Salaries and expenses" for 1987 is $39,250,000 which includes built-in changes of +$5,150,000 and program increases of +$1,800,000.

Summary of Resource Requirements

(Dollar amounts in thousands)

Appropriation: Salaries and Expenses

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			578 (571)	$32,300
	Adjustments to base and built-in changes:				
GA- 6	Financing from prior year appropriation	...	+4,692		
GA- 6	Transfers	+1	+ 60		
GA- 6	Other increases	...	+1,625		
GA- 8	Other decreases	...	-1,227		
	Subtotal, adjustments to base and built-in changes			+ 1	+5,150
	1987 Base			579 (572)	$37,450

	Comparison by activity:	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-) Over 1987 Base	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
GA-10	Executive direction of the department.	41 (46)	$ 2,509 (2,417)	40 (42)	$ 2,208 (2,467)	40 (42)	$ 2,581	40 (42)	$ 2,581	...	$ ...
GA-12	Departmental staff services	346 (339)	20,925 (20,001)	335 (323)	18,316 (21,417)	336 (324)	21,271	336 (324)	22,771	...	+1,500
GA-22	Inspector General	216 (214)	13,049 (12,851)	203 (206)	11,776 (13,108)	203 (206)	13,598	203 (206)	13,898	...	+ 300
	Total requirements	603 (599)	$ 36,483 (35,269)	578 (571)	$ 32,300 (36,992)	579 (572)	$ 37,450	579 (572)	$ 39,250	...	$+1,800

Note: Permanent positions in parentheses represent workyears. Dollar amounts in parentheses represent obligations.

Justification of Adjustments to Base and Built-in Changes

(Dollar amounts in thousands)

	FTE	Amount
Financing from prior year appropriation:	...	+4,692
FY 1986 Transfers:	+1	+60

The Department transferred one position and $60,000 from the Economic Development Administration (EDA) as part of an effort to consolidate EDA personnel policy and operations staff into the Office of the Secretary.

Other Increases:	FTE	Amount
Within-grade step increases	...	...
Restoration of 1986 pay reduction	...	+ 184
Rent payments to GSA	...	+ 971
Federal Telecommunications Systems	...	+ 16
Postal service by USPS	...	+ 21
Printing and reproduction	...	+ 33
Working Capital Fund charges	...	+ 373
Supplies and materials	...	+ 6
Equipment	...	+ 21
Subtotal, Other increases	...	+1,625

Other Increases:

Within-grade step increases:

Estimated number of within-grade step increases scheduled	466	
Step increases not earned due to turnover	42	
Average step above step 1 per separation	3	
Average cost per within-grade step increase	$1,090	
Gross cost of scheduled step increases (466 x $1,090)		$507,940
Less savings due to separations (42 x 3 x $1,090)		-137,340
Subtotal, personnel compensation		$370,600
Personnel benefits at 8.1%		+30,019
Total costs		$400,619
Amount absorbed		-400,619
Total		...

Restoration of 1986 pay reduction.. $184

The Congress restored 80% of the proposed 5% pay cut in the FY 1986 appropriation and this request for $184,000 is to restore the remaining 20% in FY 1987.

Rent payments to GSA.. $971

The GSA estimate of $2,609,000 for 1986 rent payments was substracted from the 1987 estimate for currently occupied space of $3,580,000 for an increase of $971,000.

Communications, utilities and other rent..................................		$37
Federal Telecommunications Systems..................................	$16	
Postal Services by USPS..	$21	

The increase of $15,774 on a base of $223,000, for Federal Telecommunications Systems charges, is based on a distribution of rate and usage charges as determined by the General Services Administration.

An increase in postal rate charges is based on a distribution of rate and usage charges as determined by the U.S. Postal Service. On a base of $115,000, the increase is $20,520.

Printing and reproduction... $33

The cost of printing (labor, paper, and commercial procurement prices) continues to increase. The increase of $32,996 is to offset a portion of the rise which has occurred in the past year and be computed on a base of $259,000.

Working Capital Fund charges.. $373

The General Administration's Working Capital Fund charges necessary to maintain the current level of operations have increased by $373,000 over a base of $3,948,000.

Supplies and materials.. $6

Based on a study, the cost of supplies and materials has increased by 1.7 percent. When applied to the base of $340,000, an adjustment of $5,780 is required.

Equipment.. $21

A study of selected office furniture and equipment most commonly used throughout the Office of the Secretary determined that the cost of these items rose approximately 6.0 percent between FY 1984 and FY 1985. When applied to the base of $346,000, this increase amounts to $20,760. These items include typewriters, desks, chairs, bookcases and tables.

Other Decreases:

Management savings	-$62
Employees' Compensation Fund	-169
Productivity reviews	- 4
Non-recurring Payroll/Personnel costs	-992
Subtotal, other decreases	-$1,227

Other Decreases:

Management savings.. - $62

The reduction of $62,000 is the result of a program to decrease the cost of positions in grades GS-11 to GS-15. These savings may be achieved by improved overall position management or through other administrative cost reductions.

Employees' Compensation Fund.. -$169

The decrease of $169,000 in the repayment to the Employees' Compensation Fund is the result of lower costs in the year ending June 30, 1985 than in the year ending June 30, 1984.

Productivity reviews.. -$4

The implementation of A-76 productivity reviews will result in savings of $4,000 in FY 1987.

Non-recurring Payroll/Personnel costs................................. -$992

The conversion of the Department's Payroll/Personnel system is a one time cost and will not be required in FY 1987.

Appropriation Language and Code Citations:

Appropriation: Salaries and Expenses

1. For expenses necessary for the general administration of the Department of Commerce,

15 U.S.C. 1501

15 U.S.C. 1501 provides that: "There shall be ... the Department of Commerce, and a Secretary of Commerce, who shall be the head thereof ..." The sections which follow 15 U.S.C. 1501 establish various Assistant Secretaries and define general powers and duties of the Department.

2. including not to exceed $2,000 for official entertainment, $39,250,000

No specific authority

5 U.S.C. 5536 prohibits additional pay or allowance to employees unless the appropriation therefore specifically states that it is for the additional pay or allowance.

Justification of Program and Performance

(Dollar amounts in thousands)

Activity: Executive direction of the Department

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Secretary............................	10 (14)	$ 933 (901)	9 (11)	$ 801 (912)	9 (11)	$ 945	9 (11)	$ 945	... (...)	...
Deputy Secretary......................	11 (11)	668 (643)	11 (11)	583 (657)	11 (11)	685	11 (11)	685	... (...)	...
Executive Secretariat.................	13 (13)	461 (441)	13 (13)	420 (457)	13 (13)	492	13 (13)	492	... (...)	...
Assistant Secretary for Administration	7 (8)	447 (432)	7 (7)	404 (441)	7 (7)	459	7 (7)	459	... (...)	...
Total requirements....................	41 (46)	$2,509 (2,417)	40 (42)	$2,208 (2,467)	40 (42)	$2,581	40 (42)	$2,581	... (...)	...

Goals and Objectives

GOALS: To foster, promote and develop domestic and foreign commerce, economic development, technological advancement and the balanced use of natural resources. To provide policy, management and leadership for the Department's programs.

OBJECTIVES: To promote progressive business policies and growth; to expand export opportunities and strengthen the international economic position of the United States; to assure effective use and growth of the Nation's scientific and technical resources; to analyze and disseminate information concerning the economy; to manage the Nation's oceanic and atmospheric resources; and to improve Departmentwide management through a greater concentration on programs and operational results.

Base Program

This activity provides funding for the Secretary, Deputy Secretary, Executive Secretariat, and Assistant Secretary for Administration. These offices, collectively, have chief responsibility for all matters affecting policy, programs, and functions assigned to the Department. This responsibility includes the overall management of the Department of Commerce and the representation of the Administration before the public, the business community, the Congress and other Executive agencies.

A summary of the individual offices and their specific areas of responsibility follows:

Secretary	Provides for the organization and general management of the Department.
Deputy Secretary	Serves as the principal advisor to the Secretary affecting the Department, and performs continuing and special duties the Secretary may assign. He is charged by law with performing the duties of the Secretary in case of absence, sickness, death or resignation of the Secretary. Also contained in this office is the Associate Deputy Secretary who is the principal assistant to the Deputy Secretary in managing the day-to-day operations of the Department.
Executive Secretariat	Provides control over incoming correspondence addressed to the Secretary or Deputy Secretary; reviews all materials for the Secretary or Deputy Secretary for compliance of rules, instructions and standards of the Department; maintains an accurate and current correspondence suspense system; advises principal officials of the Department of Secretarial actions or decisions affecting their areas of responsibility; and maintains permanent official files for the Secretary and Deputy Secretary.
Assistant Secretary for Administration	Functions as the principal advisor to the Secretary and the chief officer of the Department on matters of administrative management. The authority of the Secretary on administrative management matters such as personnel, budget, organization, procurement and finance is delegated by the Secretary to the Assistant Secretary for Administration.

Justification of Program and Performance

(Dollar amounts in thousands)

Activity: Departmental staff services

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
General Counsel................................	36	$3,055	34	$2,661	34	$3,030	34	$3,030	...	...
	(35)	(2,912)	(32)	(2,956)	(32)		(32)		(...)	
Congressional and Intergovernmental Affairs....	28	1,499	28	1,306	28	1,517	28	1,517	...	...
	(27)	(1,420)	(27)	(1,454)	(27)		(27)		(...)	
Public Affairs.................................	8	608	8	561	8	622	8	622	...	...
	(8)	(588)	(8)	(598)	(8)		(8)		(...)	
Business Liaison...............................	14	754	14	689	14	802	14	802	...	...
	(14)	(745)	(14)	(763)	(14)		(14)		(...)	
Consumer Affairs...............................	5	259	5	213	5	264	5	264	...	...
	(5)	(244)	(5)	(250)	(5)		(5)		(...)	
Office of Finance and Federal Assistance	5	208	5	157	5	209	5	209	...	...
	(4)	(188)	(5)	(194)	(5)		(5)		(...)	
Financial Management Division..................	14	1,005	14	894	14	1,035	14	1035	...	...
	(14)	(989)	(14)	(1,007)	(14)		(14)		(...)	
Federal Assistance Division....................	7	315	7	251	7	303	7	303	...	...
	(7)	(280)	(6)	(289)	(6)		(6)		(...)	
Office of Management and Organization..........	27	1,207	25	1,086	25	1,246	25	1,246	...	...
	(26)	(1,175)	(21)	(1,198)	(21)		(21)		(...)	

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Director for Management and Information Systems.	5	$338	4	$289	4	$335	4	$335	...	...
	(5)	(320)	(4)	(325)	(4)		(4)		(...)	
Office of Information Resources Management....	37	1,807	36	1,618	36	1,870	36	1,870	...	...
	(36)	(1,757)	(32)	(2,679)	(32)		(32)		(...)	
Office of Information Systems.................	3	305	3	243	3	288	3	1,788	...	$1,500
	(3)	(275)	(3)	(279)	(3)		(3)		(...)	
Director for Personnel and Civil Rights.........	6	353	6	308	6	360	6	360	...	...
	(6)	(336)	(6)	(345)	(6)		(6)		(...)	
Office of Personnel...........................	33	2,304	30	2,000	31	2,358	31	2,358	...	...
	(32)	(2,178)	(32)	(2,338)	(33)		(33)		(...)	
Office of Civil Rights........................	19	1,051	19	909	19	1,069	19	1,069	...	...
	(19)	(996)	(19)	(1,020)	(19)		(19)		(...)	
Director for Planning, Budget and Evaluation....	4	227	4	170	4	218	4	218	...	...
	(4)	(202)	(4)	(207)	(4)		(4)		(...)	
Office of Budget..............................	25	1,375	24	1,191	24	1,398	24	1,398	...	...
	(25)	(1,311)	(24)	(1,341)	(24)		(24)		(...)	
Office of Program Planning and Evaluation.....	23	1,298	23	1,131	23	1,297	23	1,297	...	...
	(23)	1,215	(22)	(1,242)	(22)		(22)		(...)	

(Dollar amounts in thousands)

	FY 1985 Acutal		FY 1986 Currently Available		FY 1987 Base		FY 1987 Estimate		Inc. (+) or Dec. (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Director for Procurement and Administrative Services........................	6	$433	6	$373	6	$425	6	$425	...	...
	(6)	(400)	(6)	(410)	(6)		(6)		(...)	
Office of Procurement Management.............	14	779	14	714	14	820	14	820	...	...
	(14)	(768)	(13)	(787)	(13)		(13)		(...)	
Office of Administrative Services Management.	14	736	14	668	14	776	14	776	...	...
	(14)	(728)	(14)	(741)	(14)		(14)		(...)	
Office of Real Property Programs.............	2	369	2	328	2	371	2	371	...	...
	(2)	(357)	(2)	(364)	(2)		(2)		(...)	
Office of Security...........................	5	268	5	227	5	279	5	279	...	...
	(5)	(257)	(5)	(264)	(5)		(5)		(...)	
Office of Small and Disadvantaged Business Utilization................................	6	372	5	329	5	379	5	379	...	...
	(5)	(360)	(5)	(366)	(5)		(5)		(...)	
Total requirements.............................	346	$20,925	335	$18,316	336	$21,271	336	$22,771	...	+$1,500
	(339)	($20,001)	(323)	($21,417)	(324)		(324)		(...)	

Goals and Objectives

GOALS:	To integrate planning, management, and the personnel and financial resources of the Department.
OBJECTIVES:	
General Counsel	To act as the chief legal officer of the Department; to supervise, manage, and provide policy for legal operations of the Department, including provision of advice, guidance and representation on matters involving all components and programs of the Department; to develop the Department's legislative programs; and to heighten the ability to contribute to policy development and related legislative initiatives in such key areas as antitrust laws which serve to help increase the competitiveness of U.S. firms.
Congressional and Intergovernmental Affairs	To present the Administration's and Department's programs and legislation to Congress, particularly in the areas of trade, productivity, new businesses, and communications; to centralize the policy and planning functions of all DOC Congressional Liaison Offices. To act as liaison between state, county, municipal and Indian Tribal governments and their association in matters of information requests and assistance regarding Departmental programs.
Public Affairs	To direct public affairs activities of the Department, particularly those related to the areas of exports, productivity, technology and economic recovery; and to improve the effectiveness of communications with other government agencies, the news media and the private sector.
Business Liaison	To promote the involvement of the business community in setting and accomplishing Departmental goals; and to manage and publicize a technical assistance and referral service on Government information for business.
Consumer Affairs	To help the business community improve customer relations; to provide liaison with consumer organizations and with state, county, and municipal consumer protection agencies; and to respond to consumer complaints.

Office of Finance & Federal Assistance	To act as the senior staff office in formulating, analyzing, coordinating, and implementing financial management and financial assistance policies Departmentwide. Such policies include the debt management, cash management, A-76, travel management and federal assistance programs.
Office of Management & Organization	To act as the senior staff office for both Departmentwide and Governmentwide initiatives in providing management improvement and evaluation, internal control oversight, audit follow-up, GAO liaison, and directives management.
Director for Management & Information Systems	To act as the senior staff office with respect to planning, developing, implementing and evaluating policies and procedures related to automated and non-automated information systems for the Department; and to oversee the Management Service Center accounting operations and central computer facility.
Director for Personnel & Civil Rights	To act as the senior staff office in formulating and implementing personnel, safety, health, and civil rights policies Departmentwide.
Director for Planning, Budget & Evaluation	To serve as the principle staff advisor to senior management concerning the efficient utilization and distribution of resources Departmentwide. This responsibility includes: coordinating the annual budget requests; providing a staff review of bureau operations; insuring that violations of law with respect to fiscal matters are avoided; and undertaking programmatic evaluations of Departmental programs and managing the Department's Management By Objectives system.
Director for Procurement & Administrative Services	To act as the senior staff office with respect to the improvement of the management and delivery of administrative support services for the Office of the Secretary and other elements of the Department. This responsibility includes planning, developing and implementing policies and procedures for the acquisition of materials, supplies, equipment and services through procurement and contracting processes; implementing management information systems in procurement, personal and real property; and providing guidance and supervision of the Small and Disadvantaged Business Utilization program.

Base Program

This activity provides central staff support to the senior management of the Department. Through such assistance, the Secretary is able to plan, supervise, and direct the full resources and programs of the entire Department in order to execute his obligations under law. Collectively, the offices ensure coordination among the bureaus' interrelated programs; provide legal advice and review on a wide range of matters; promote the efficient utilization of resources; maintain liaison activities with the Congress, and the business, consumer affairs and general public communities; and provide policy advice on matters affecting budget, personnel, civil rights, procurement, organization, information and management systems Departmentwide.

A summary of the individual offices funded by the Salaries and expenses appropriation and their specific areas of responsibility follows:

General Counsel	Provides substantive legal counsel in a wide range of areas; ensures the preparation, review, and clearance of all expressions of official opinion on proposed or pending legislation, policy, Departmental organization and administration; and represents the Department in legal proceedings before such bodies as regulatory commissions, independent boards, similar tribunals and courts.
Congressional and Intergovernmental Affairs	Presents the Administration's and Department's programs and legislation to Congress, with emphasis on the areas of trade, productivity, new business and communications; centralizes the policy and planning functions of all Congressional Liaison offices of Commerce. Provides a central point-of-contact and assistance for local governments seeking information on Department programs; provides and coordinates outreach functions to local governments; and provides oversight of Department's implementation of various Presidential proposals and objectives.
Public Affairs	Plans, develops, and carries out, in concert with the heads of the operating units, a Departmentwide public information program to support major Departmental priorities and to meet the needs of individual operating units. Prepares and issues press releases and broadcasting materials involving Departmental officials. Conducts all public relations activities; acts as liaison to promote consistency and coordination between the Department, Executive Branch and consumer groups on public information activities.
Consumer Affairs	Provides assistance to businesses with customer relations problems and to consumers with complaints. Plans and implements Plain English campaign; arranges for consumer participation in the development of voluntary standards for consumer products; supports liaison to constituents (business groups and companies, state and local government agencies, consumers), White House Consumer Office and other Federal agencies; provides technical assistance to operating units; and resolves business/customer problems through constituent correspondence.
Business Liaison	Acts as the Department's liaison and coordinator with the business community. Serves as the central point of contact to provide outreach and consultation with the business community on business needs and concerns. Promotes business involvement in significant Department policymaking and program development.

Office of Finance & Federal Assistance	
Financial Management Division	Develops policies and procedures and provides guidance and technical assistance to operating components regarding all financial matters. Establishes and implements Departmental and central agency initiatives for debt management and cash management and ensures compliance with OMB Circular A-76 requirements and principles. Provides liaison and reporting to the General Services Administration and the Office of Management and Budget regarding travel policy and management.
Federal Assistance Division	Develops and coordinates implementation of policies and procedures for all financial assistance programs (loans, guarantees), and serves as liaison for financial assistance matters with outside agencies including OMB and Treasury.
Office of Management & Organization	Provides in-house management consulting services to top officials. Leads Departmental participation in Governmentwide improvement projects. Manages projects which support Department management improvement initiatives. Conducts management evaluations and organizational reviews. Administers the Department's directives, internal control, audit follow-up and GAO liaison activities.
Director for Management & Information Systems	
Office of Information Resources Management	Develops and implements long-range plans for the Department's Information Management and Technology Program in accordance with the Paperwork Reduction Act (P.L. 96-511) and the Brooks Act (P.L. 89-306); develops and implements plans for upgrading the Departmental computing facilities.
Information Systems	Coordinates management information requirements among Departmental components and integrates them to support the Departmental Information System.
Director for Personnel & Civil Rights	
Office of Personnel	Provides personnel policy, planning, and management, including workforce planning, labor-management relations, employee health, management training, personnel system design, implementation, and evaluation. Provides policy and program management for the safety and health of employees.

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Office of Civil Rights	Conducts activities to ensure equal employment opportunity in the Department including: affirmative action; non-discrimination in Federally-assisted programs; and the investigation, adjudication, reporting, and development of final decisions on EEO complaints.
Director for Planning, Budget & Evaluation	
Office of Budget	Provides budgetary guidance and direction to all units of Commerce and liaison for budget activities in the legislative and executive branches. Principle advisory group to the Assistant Secretary for Administration, Deputy Secretary and Secretary on budgetary issues. Reviews all budget requests and makes recommendations to the Secretary on funding levels for programs within the Department. Transmits all Congressional and Executive level budget guidance to the Department's operating units. Participates in legislative reviews of operating programs. Coordinates and prepares all budget related briefings, press releases and news briefings on the Office of Management and Budget, Secretarial and Congressional budget submissions.
Program Planning & Evaluation	Helps establish an operating program and a management planning system throughout the Department. Provides support on key policy, program, management and evaluation issues. Responsible for managing the Management By Objectives (MBO) system for the Department's annual planning and evaluation program.
Director for Procurement & Administrative Services	
Office of Procurement Management	Develops, coordinates, implements, and supports other Departmental units in policies, programs, and activities which govern or affect the procurement of all equipment, materials and services for the Department; develops supporting automated systems; and conducts oversight reviews of policy implementation.
Office of Administrative Services Management	Develops and implements policy, maintains oversight, and oversees automated systems requirements in support of administrative services.
Office of Real Property Programs	Provides facilities support services nationwide, and manages the operations and maintenance of the Herbert C. Hoover Building, which includes acting as coordinator on all major National Capital Region facility management activities; serves as Departmental liaison on historic preservation; and provides for alterations and renovations, telecommunications services and other support activities.

Office of Security	Provides policies and procedures for programs of physical and personnel security, as well as emergency preparedness within the Department.
Office of Small & Disadvantaged Business Utilization	Acts as focal point on matters concerning utilization of small and disadvantaged businesses in Departmental contracts in compliance with the Small Business Act (15 U.S.C. 644(k)) and Public Law No. 95-507, Sections 8 and 15.

Increase for FY 1987

General Administration requests an increase of $1,500,000 to be used for the initial acquisition of hardware and software required for an integrated Financial and Management Information System (FMIS). The funds are needed to carry out the Department's program for the development of a model accounting system, and the establishment of a model equipment and communications system at one of the Department's four Regional Administrative Support Centers (RASCs).

In accordance with OMB Circular No. A-127 (Financial Management Systems), a planning process has been established to coordinate department-wide development of administrative and management systems. The Department's financial and accounting systems are antiquated and inconsistent. They do not provide financial information in a timely manner and in a format which can be used by the program managers at all levels of the Department. The eight existing systems are also costly. The costs of maintaining existing bureau systems are estimated at $10 million annually, while the capital investment costs of computer and telecommunication support for a modern financial and management system for the Department are estimated at $13.7 million through FY 1991. The FMIS is expected to lower annual maintenance costs to $5 million a year. Reliable estimates of maintaining subsidiary, or automated "cuff", systems are not yet available, but are believed to amount to an additional $2 to $3 million annually. Related costs of development and implementation will be managed with existing system development resources.

Since FY 1981 the Department has been pursuing a "single" financial and management information system through the development of common administrative systems and processes for personnel, payroll, payments procurement, real property, and personal property. The Department began the effort faced with multiple personnel and payroll systems, labor intensive and bureau specific administrative payment processing, little or no automated support for its financial management activities, and limited capability to assemble an overall picture of the Department. Development of a model accounting system, interfaced with DOC administrative or feeder systems, to replace the eight accounting systems operated at present will be a major step toward development of a single, integrated financial and management information system.

During FY 1986, we will complete the specific requirements for the system. This will permit us in FY 1987 to design and develop a model accounting system which will be tested at the National Bureau of Standards, and a model management system, including performance data, for testing at the National Oceanic and Atmospheric Administration.

The object class detail follows:

Object Class	Amount
Equipment..................................	$1,500,000

Justification of Programs and Performance

(Dollar amounts in thousands)

Activity: Inspector General

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc (+) or Dec (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Executive Direction......................	13	$783	13	$706	13	$816	13	$816	...	...
	(13)	(771)	(13)	(786)	(13)		(13)			
Audits..................................	122	7,177	113	6,477	113	7,478	113	7,778	...	+$300
	(119)	(7,068)	(114)	(7,209)	(114)		(114)			
Automated Information Systems............	13	652	13	589	13	680	13	680	...	...
	(13)	(643)	(13)	(656)	(13)		(13)			
Investigations...........................	43	2,349	41	2,120	41	2,448	41	2,448	...	...
	(44)	(2,313)	(41)	(2,360)	(41)		(41)			
Planning, Evaluation and Inspections.....	15	914	13	824	13	952	13	952	...	...
	(15)	(899)	(15)	(918)	(15)		(15)			
Administration...........................	10	1,174	10	1,060	10	1,224	10	1,224	...	...
	(10)	(1,157)	(10)	(1,179)	(10)		(10)			
Total requirements......................	216	$13,049	203	$11,776	203	$13,598	203	$13,898	...	+$300
	(214)	($12,851)	(206)	($13,108)	(206)		(206)			

Goals and Objectives

GOALS:

- Prevent and detect fraud, waste, and abuse in Commerce programs and operations, both internal and external.
- Promote economy and efficiency in Commerce operations.
- Promote more effective delivery of Commerce programs.

OBJECTIVES:

- Concentrate on those programs and operations which have the greatest potential for: identifying fraud; recovering funds; precluding unnecessary outlays; and improving management.
- Improve the value of the Inspector General's findings and recommendations to senior Departmental management.
- Enhance the Inspector General's ability to review areas of high technology, especially ADP.
- Establish a minimal deterrence presence in all external operations of the Department.

Base Program

The Office of Inspector General (OIG) was established in FY 1979 in response to the Inspector General Act of 1978. The OIG provides an independent voice to the Secretary and other senior Commerce managers in matters relating to fraud, waste, abuse and mismanagement. The Office has the authority to inquire into all program and administrative activities of the Department, including those individuals or organizations performing under grants, contracts, or loans with the Department.

The work is conducted primarily through audits (management and financial), investigations and inspections. The findings of the audits and inspections are presented to the pertinent operating official and agency head, who are given an opportunity to review and comment upon the reports before they are released in final form. Investigations are referred to the U. S. Department of Justice if evidence of criminal wrongdoing is uncovered or if civil recoveries are possible. Findings may also be referred to the appropriate agency official for administrative redress.

The mission of the Office of Inspector General is accomplished through the following activities:

Executive Direction	includes the immediate office of the Inspector General and the Office of Counsel; provides overall leadership and policy direction, including reviews of proposed and existing Departmental legislation and regulations, and legal assistance for auditors, investigators, and inspectors.
Audits	performs management audits of Commerce programs and operations; financial and compliance audits of DOC contracts, grants, loans, cooperative agreements, and loan guarantees.
Automated Information Systems	performs audits and reviews of the Department's major computer systems, operations, equipment, security and procurement.
Investigations	conducts investigations of alleged or suspected criminal wrongdoing by Commerce employees, grantees, contractors and loan recipients.
Planning, Evaluation and Inspections	performs inspections of Departmental organizations, develops and evaluates the policies and procedures of the OIG, and evaluates OIG internal operations.
Administration	provides internal management, personnel and information services for the OIG.

The Office of Inspector General is headquartered in Washington, D. C., but maintains seven regional offices. The Office of Audits has organizations in Atlanta, Denver, San Francisco and Seattle. The Office of Investigations has organizations in Atlanta, Boulder and Newark. As of December 31, 1985, the OIG had 197 permanent employees, 63 of which were located in the regions. In FY 1986 and 1987, the OIG is funded at 206 full-time equivalent employees, of which 67 will be located in the field.

The OIG is a level of effort activity with a direct correlation between the resources provided to it and the amount of return on that investment. In the past four years, its operations have led to 169 convictions and indictments and the identification of $153 million in savings, at a total cost in the OIG budget of $47 million. This is a savings to cost ration of 3.2:1. This does not include questioned costs, unresolved costs, or the nonfinancial yield of investigations, inspections and audits.

The Commerce OIG's workload goals reflect an emphasis towards return on investment. The quantified FY 1984 - FY 1987 results and projections of OIG operations are:

	1984 Actual	1985 Actual	1986 Proposed	1987 Proposed
Number of management audits..............	41	41	32	32
Number of contract, grant, & loan audits.	152	69	40	55
Number of C/G/L audits processed.........	699	947	980	998
Number of ADP audits.....................	9	10	12	12
Number of inspections....................	27	44	30	30
Number of investigations.................	472	247	250	250
Management commitments ($000):				
To recover funds.........................	$ 8,390	$36,622	---	---
To more efficiently use funds..........	8,562	7,720	---	---
Investigate Recoveries...................	113	1,274	---	---
Total savings............................	$17,065	$45,616	---	---
Indictments/Convictions..................	17	29	---	---
Administrative sanctions.................	23	24	---	---

These workload measures provide only a small indication of the impact of the OIG. They do not reflect the effect the Office has on deterring fraud and abuse, future savings due to management improvements made in response to OIG recommendations, and the positive influence of an OIG presence on the morale of employees and managers.

The dramatic increase in recoveries by the OIG reflects a policy of emphasizing the identification of problems in financial assistance awards before substantial monies are disbursed. It is better, and certainly easier, to prevent the outlay of unnecessary funds than to recover them after the fact.

The Office of Inspector General conducts its operations through a tightly interrelated program of audits, investigations and inspections.

The Office of Audits conducts audits of varying scope in both internal Department programs and operations (management, or internal audits) and in external activities funded by or through the Department, e.g., contracts, grants, cooperative agreements, loans, loan guarantees (external audits). In accordance with OMB Circular A-128, the Office of Audits also reviews organization-wide audits of State and local governments which receive Commerce funds. The OIG also assists in planning the audits, which are conducted by CPA firms or state audit agencies.

A management audit can be one or more of the following: (1) a financial and compliance audit, to determine compliance with laws, regulations and sound accounting procedures; (2) an efficiency and economy audit, to determine whether resources are being managed efficiently and economically and whether adequate internal controls are in place; and/or (3) a program results audit, to determine whether the desired benefits of a program are being achieved. Management audits address economy and efficiency in Commerce programs. This type of audit concentrates on the delivery of services, program results, cost effectiveness, vulnerabilities and other intangibles. It includes interviews with clients and program participants in both the private and public sectors.

External audits are performed to determine one or more of the following: (1) adequacy of accounting procedures and internal controls; (2) cost allowances; (3) compliance with laws, regulations, and the terms and conditions of the award; and/or (4) whether the project achieved the desired results or reflects the performance level required, i.e., did the taxpayer get what they paid for?

Studies performed by the President's Council on Integrity and Efficiency reveal that most fraud is not committed within the Government, but is perpetrated against it from the outside. This is not a widely understood distinction. In recognition of this fact, the Office of Audits pioneered a program which provides for OIG review of selected grantees within 180 days of award. This gives the audit team an opportunity to review plans, progress, accounting systems, and the like before most of the award funds have been disbursed. The methodology was developed and tested in the Department's public works programs, where total "up-front" savings from OIG recommendations so far are expectd to be more than $14.7 million. As a result of its success, the technique has been extended to other Departmental grant programs. The OIG is also looking in depth at various aspects of the Commerce loan and loan guarantee portfolio. In one area alone, 46 percent of the loans (with a value of $.5 billion) were delinquent or in default at the time of audit.

Audits of computer systems are performed by the Office of Automated Information Systems (AIS). The Department of Commerce is among the largest computer user in the world, and relies heavily on automation and telecommunications networks to collect, process, store and disseminate information. Major users include the National Weather Service, the Bureau of Census, the Patent and Trademark Office, and the National Bureau of Standards. When conducting an ADP audit, AIS reviews the security of programs and installations, performs capacity utilization studies, analyzes procurement requests and plans, searches for areas where new automation may duplicate existing data bases, and determines whether the needs of the clients and users are being met.

The results of OIG management and ADP audits conducted during the current fiscal year have been significant. They include:

- Hydrographic Surveys -- NOAA has accepted OIG recommendations to use more cost-effective shore-based field parties to conduct surveys of inshore areas. This approach will increase hydrographic surveys at a cost less than increased ship operations.

- Trade Adjustment Assistance (TAA) -- OIG revealed that only about 3.6 percent of U.S. businesses seeking TAA financial and technical assistance were successful in recovering from import injuries. The audit concluded that no major program changes would be likely to significantly increase this succes rate and help U.S. firms overcome the current negative world economic and marked conditions which are placing certain U.S. firms in serious jeopardy because of foreign competition. The OIG conclusion that this program was inherently unworkable was communicated to both the Department and Congress.

- Emergency Jobs Act -- OIG audit reviews of over 80 grants could save taxpayers up to $14.7 million if program managers implement audit recommendations to terminate or deobligate funds because of grantee violations of law, regulations or grant agreements. Of greater importance, perhaps, the audits have shown that these public works projects are inherently incapable of immediate job creation for the unemployed, which was the intent of the Act, and that the few jobs for the unemployed actually created by this program were generated at enormous cost to the taxpayers, about $330,000 per job. The auditors estimated that no more than $3.5 million of the $100 million Jobs Act program will trickle down as salary payments to the unemployed.

- Major Computer Systems Development -- The OIG auditors, working closely with the Department's information resource managers, focused their reviews of the major ADP systems development efforts at Census, Patent and Trademark Office, and NOAA in order to improve the system planning, procurement methods and operating methodologies, with an eye to reducing the system lifecycle costs. OIG reviews of these systems will continue over the next few years, especially for the 1990 census and automation of the patent system.

In the Audit areas, priority in FY 1986 and 1987 will be given to the areas which have the greatest potential for return on investment both in terms of dollars and in improved management and operation of the Department's major programs. These include such programs as:

- Review of the planned replacement of the National Weather Service automated tracking system;
- Reduction of unliquidated balances in grant programs;
- Review of the 1990 decennial census planning;
- Emphasis on debt management throughout the Department, especially collections;
- Analysis of the Department's super-computers and ADP systems development;
- Examination of the direct loan, loan guarantees and revolving loan programs; and
- Reviews of the national laboratories.

The Office of Investigations reflects the need to deter or stop instances of criminal activity which occur in any large multi-billion dollar operation. Most of the fraud against the Government, as mentioned earlier, is committed by grantees, contractors, and recipients of loans and other financial assistance. Fortunately, the vast majority of firms, organizations and individuals are honest in their dealings with the Department, and instances of wrongdoing are relatively few. The OIG concentrates its investigative effort on those Commerce programs which fund external activities, where the potential for fraud is greatest or where early detection can prevent major problems from occuring later. The OIG has started proactive investigations in selected activities to determine the extent of actual vulnerability and whether there is any indication of fraud. The first area chosen was the revolving loan funds generated through EDA's Title IX grant program, and criminal investigations have been started as a result of each of the initial loans examined. Tentative selections for future proactive reviews by OIG agents include sole source procurements, loans and bid-rigging.

During the past fiscal year, successful investigations by the OIG have covered:

- Bid-rigging on public works projects in Alabama, Georgia, Florida and Louisiana.

- Misuse of MBDA grant funds which resulted in the grant's termination and indictment of the grantee official.

- Misconduct by a Foreign Commercial Service Officer stationed overseas, who was charged with taking kickbacks, submitting fraudulent vouchers, and diverting Government funds to personal or improper uses.

In cooperation with the Department's efforts to more tightly control the issuance of grants and loans, the Office of Investigations also conducts name checks on individuals and credit checks on businesses before financial award is made. The information is then fed back to the Department's Office of Finance and Federal Assistance. This is a very cost-effective effort, requiring little direct OIG time yet providing a substantial safeguard. In one recent case, the Comptroller of a firm which had been approved for a Commerce grant was found to have a felony conviction for embezzlement. In several instances, applicants for assistance were identified as having a history of financial difficulties, and program officials therefore denied their application.

As a general rule the Office of Investigations does not itself handle cases involving personnel abuses or other administrative matters. Instead, OIG refers these matters to the appropriate Commerce agency for action, although the OIG will monitor the case through to its disposition and provide technical assistance to the agencies on how to conduct their reviews. Exceptions are made when the alleged infraction involves a senior Department official, if the alleged conduct is criminal or otherwise appears serious. Where it is practicable to do so, the OIG advises complaintants of the disposition of matters referred to it.

The Inspections Program within the Office of Planning, Evaluation and Inspections was created to expand the coverage of the OIG in the Department of Commerce. Before the program was established in 1982, the OIG had an audit cycle of over 35 years, over 97 percent of the Department had never been visited by the OIG, and 93 percent would still not be audited after 5 years. Like the Office of Automated Information Services, it was created by the Inspector General from internal resources.

Inspections are brief reviews conducted quickly and undertaken to foster preventive management. They are intended to gather current information about programmatic and administrative problems while there is still time to correct them, and also to highlight for Department managers those activities which are being performed well. The inspection team provides immediate debriefings to agency management upon its return from a visit, and a written report is issued shortly thereafter. Significant problems identified during an inspection are brought to agency managers or referred to OIG auditors or investigators for follow-up. An inspection differs from an audit in terms of timeliness, depth of inquiry, and procedures which govern its performance. Because of the freshness of the inspections approach and findings, they have been warmly received and reacted to by Commerce management. Since late in FY 1982, when the inspection program started, the OIG has made nearly 80 inspections. The program is stabilized now at 30 inspections per year, with 8 employees assigned directly to the function.

Increase for FY 1987

The Office of the Inspector General is requesting $300,000 in contract funds to provide technical assistance in complex ADP audits and expand preaward audits of major ADP procurements.

Of this amount, $150,000 will be used to augment the number of pre-award audits of major Commerce procurements by the Defense Contract Audit Agency (DCAA). These audits provide a first line of defense against abuses on the part of grantees, contractors and loan recipients, at a point before funds are released.

The most critical of these procurements are computer system purchases. The Department is continually upgrading and acquiring new ADP systems to fulfill its mission. A total value of $1.6 billion is being considered in new system development now. Forty-five percent of the Department's 1984 procurements were for ADP equipment. While OIG's Office of Automated Information Systems plans to devote its resources to detailed evaluations of the various ADP systems being proposed throughout the Department, very little is being done to evaluate the capabilities and reasonableness of the myriad of newly formed vendors who are competing for the Department's ADP dollars. To ensure that Commerce is receiving the best service possible, added attention must be given to pre-award audits of prospective ADP suppliers, especially those competing for software, peripheral or support contracts. Based on prior experience with DCAA, each audit would cost from $5,000 for small purchases and up to $25,000 for major systems support. Also based on prior experience, the savings to be generated by these audits will more than cover the costs.

The remaining $150,000 will be used to obtain technical assistance from the Air Force's Federal Computer Performance Evaluation and Simulation Center (FEDSIM), or similar consultants, to provide expertise in a wide range of reviews of these very complex ADP systems. FEDSIM is currently assisting the OIG in a utilization audit of a NOAA supercomputer.

The Department of Commerce relies heavily on computers and related telecommunications newtorks to collect, process, store and disseminate information. Commerce systems are complex and require state-of-the-art technology. Examples of this are the Class VI supercomputer used by the National Weather Service for storm tracking and weather forecasting, and the Environmental Research Laboratories' supercomputer utilized for geophysical fluid modeling. There are also a number of large systems efforts in progress, such as the PTO automation with life cycle costs of $700 million; the replacement of the Census ADP systems at an estimated cost of $103 million; telecommunicatins support for NOAA's land, satellite and microwave networks, expected to cost $35 million; and the development of the Department's Scientific Computer Center, estimated to cost $20 million. Commerce computer systems must protect such sensitive data as ITA's export licensing system, BEA's leading economic indicator, and the Bureau of the Census' demographic and economic data.

The Office of Automated Information Systems performs a wide variety of ADP audits on the Department's computer systems, concentrating on management (Commerce-wide and individual bureaus), security, systems design, operations, software, communications, procurements, capacity, efficiency, and data base management systems. However, they do not have the equipment or the staff ability to perform capacity utilization studies and other highly technical reviews on the Department's supercomputers and systems.

It would be inefficient to have the expertise incumbent in the staff which could perform all of the functions listed above on the most complex systems. Many of the clients reviewed are world experts in their fields. The funds requested for outside contracting assistance will allow the OIG to cover the most critical range of ADP systems in the Department.

The object class detail follows:

Object Class	Amount
Other services..................	$300,000

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

		1987 Base			1987 Estimate			Inc. (+) or Dec (-) Over 1987 Base			
		Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Emp. 12/85
11	Personnel Compensation:										
11.1	Full-time permanent positions............	579	563	$21,849	579	563	$21,849	...	...	...	581
11.3	Positions other than full-time permanent..	15	9	195	15	9	195	...	...	...	47
11.5	Other personnel compensation.............	...	...	399	...	...	399	...	...	...	...
	Total personnel compensation.........	594	572	22,443	594	572	22,443	...	...	...	628
	Other objects:										
12	Personnel benefits: Civilian..............			2,802			2,802		...		
21	Travel and transportation of persons......			698			698		...		
22	Transportation of things..................			31			31		...		
23.1	Standard level user charges...............			3,580			3,580		...		
23.2	Communications, utilities and other rent......................................			939			939		...		
24	Printing and reproduction.................			325			325		...		
25	Other services............................			5,919			6,219		+$300		
26	Supplies and materials....................			346			346		...		
31	Equipment.................................			367			1,867		+1,500		
	Total requirements..................			$37,450			$39,250		+$1,800		

Justification by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

		1987 Base			1987 Estimate			Inc (+) or Dec (-) Over 1987 Base			
		Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Emp. 12/85
11.1	Full-time permanent positions										
	General schedule			$19,315			$19,315	...	...	...	581
	Executive level			360			360	...	...	...	
	SES			2,174			2,174	...	...	...	
	Total, permanent positions	579	563	21,849	579	563	21,849	...	...	...	
11.3	Positions other than full-time permanent										
	General schedule	15	9	195	15	9	195			...	47
11.5	Other personnel compensation										
	Overtime			20			20			...	
	Cash awards			379			379			...	
	Total, other personnel compensation			399			399			...	
12.0	Personnel benefits										
	Civil Service Retirement			1,597			1,597			...	
	Federal Insurance Contribution Act (FICA)			224			224			...	
	Health insurance			372			372			...	
	Life insurance			72			72			...	
	Employees' Compensation Fund			537			537			...	
	Total, personnel benefits			2,802			2,802			...	

		1987 Base			1987 Estimate			Inc. (+) or Dec. (-) Over 1987 Base		
		Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount
21.0	Travel and transportation of persons									
	Per diem			$154			$154			...
	Airfare			503			503			...
	Other common carrier			20			20			...
	Privately owned automobiles			21			21			...
	Total, travel and transportation of persons			698			698			...
22.0	Transportation of things			31			31			...
23.1	Standard level user charges			3,580			3,580			...
23.2	Communications, utilities and other rent									
	Federal Telecommunications System			239			239			...
	Other telephone, telegraph and teletype services			378			378			...
	Postal services by USPS			136			136			...
	Rental of office copying equipment			96			96			...
	Other equipment rental			90			90			...
	Total, communication, utilities, other rent			939			939			...

		1987 Base			1987 Estimate			Inc. (+) or Dec. (-) Over 1987 Base		
		Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount
24.0	Printing and reproduction									
	Press releases..............................			$19			$19			...
	Publications................................			13			13			...
	Public use forms............................			49			49			...
	Administrative printing.....................			16			16			...
	WCF publication.............................			176			176			...
	Design and graphics.........................			36			36			...
	Photography.................................			16			16			...
	Total, printing and reproduction..........			325			325			...
25.0	Other services									
	Training....................................			49			49			...
	Maintenance of equipment....................			61			61			...
	GSA alterations and repairs.................			90			90			...
	Centralized Departmental services...........			343			343			...
	WCF Charges.................................			4,321			4,321			...
	Other Federal agencies......................			139			139			...
	Non-Federal services........................			37			37			...
	Security investigations.....................			57			57			...
	Contracts...................................			822			1,122			+$300
	Total, other services.....................			5,919			6,219			+300
26.0	Supplies and materials									
	Office supplies and materials...............			218			218			...
	Subscriptions, periodicals, etc.............			100			100			...
	ADP supplies................................			28			28			...
	Total, supplies and materials.............			346			346			...
31.0	Equipment									
	Office machines and equipment...............			367			1,867			1,500

Mr. SMITH. Go ahead.

Ms. BULOW. Thank you, Mr. Chairman. I am here today to present the Department of Commerce's 1987 budget request for General Administration.

The 1987 request for salaries and expenses is $39.3 million and 572 positions, an increase of $2.3 million and 1 position from the 1986 appropriatiion and prior year carryover funds totalling $37 million and 571 positions.

FISCAL YEAR 1986 REQUIRED REDUCTIONS

In fiscal year 1986, we will absorb the Gramm-Rudman-Hollings reductions of 4.3 percent, totalling $1.4 million. Although no reprogrammings are required, the Department has initiated a number of actions to assure that obligations do not exceed the revised level of $35.6 million. These actions should accommodate the reductions without furloughs of employees.

We placed a freeze on all personnel, procurement, and travel activities until the revised budgets and hiring plans were developed to conform to the Gramm-Rudman-Hollings reductions. We are closely monitoring expenditures to ensure we stay within our plans.

1987 REQUEST

The General Administration's salaries and expenses request for 1987 is $39.3 million, a 6 percent increase over the 1986 obligational authority of $37 million. The request includes funds to support our efforts to continue to improve the management of the department.

This year we are asking for $1.5 million to develop a Financial and Management Information System (FMIS) to replace the existing eight separate systems currently operating in the Department at an annual cost of $10 million. This effort is expected to take five years to complete, and when completed, is expected to cost $5 million a year to operate.

The goal of this project is to strengthen the overall financial, administrative and management information systems. This will be done by developing a single system to be used by all bureaus in such areas as accounting, budgeting, finance, credit management and administrative support.

Of the $1.5 million requested, $1.0 million will be used to purchase computer hardware, software and telecommunications support for a prototype system at one of our Regional Administrative Support Centers. The other one-half million is for the acquisition of off-the-shelf applications system software for the development of a model accounting system at the National Bureau of Standards.

The Department's current financial and accounting systems are antiquated and inconsistent, and in fact most are over 25 years old.

They do not provide financial information in a timely manner and in a format which can be used by the program managers at all levels of the department. The financial, programmatic, and administrative data to be generated by this system are essential to our managers in performing their duties.

With the support of this committee, we have developed and/or improved our administrative systems, so this effort, the Financial and Management Information System, is the next logical step in the process.

The other increase requested is $300 thousand for the Office of Inspector General. Our Inspector General, Sherman Funk, will discuss this part of our request in a moment.

MANAGEMENT IMPROVEMENTS

I would like to mention a few of the areas in which we have improved the management of the department.

DEBT COLLECTION:

In debt management for fiscal year 1985, we collected $219 million in accounts, loans, and other receivables compared to $198 million in fiscal year 1984.

During the Secretary's testimony before this committee, Congressman Dwyer asked him a question about the total amount of money owed the Department of Commerce. I would like for the record to state that the total amount of money owed the Department of Commerce is $1,067,000,000. That is our total portfolio.

INTEREST SAVINGS

Cash management accomplishments are significant also. Interest savings totalled $1.2 million during fiscal year 1985. These savings resulted from implementation of the following:

1. More timely deposits to Treasury from improved billings and collections;
2. Elimination of excessive cash/travel advances which minimized withdrawal of funds from Treasury;
3. Lockboxes which are used to expedite the collection and deposit of funds. In fiscal year 1985, almost $108 million is estimated to have been processed through lockboxes;

ADMINISTRATIVE IMPROVEMENTS

I chaired a task force for the President's Council on Management Improvement to assess the potential for improvements in the Government's administrative services. The study produced four reports, the first three dealing with the potential for, and examples of, shared administrative service, and the fourth covered performance standards for specific administrative functions. The reports are being used throughout the Government as guidelines for improving administrative services, as noted in the President's Management Report to the Congress.

PAYROLL/PERSONNEL CROSS-SERVICING

We are well along in our conversion to the payroll and personnel processing system of the U.S. Department of Agriculture (USDA) for which this committee approved $992,000 in the fiscal year 1985 supplemental appropriation. The conversion is occurring in phases. About 14,000 Commerce employees are now serviced by USDA and the remainder will be by the end of calendar year 1986.

This project demonstrates the potential for sharing administrative support among departments. By sharing USDA services, we benefit by obtaining a state-of-the-art system and reducing our costs from $140 to $86 per employee when we are totally on the system. USDA will be able to keep its costs down because of the economies of scale and has also benefited from several system improvements suggested by Commerce.

WAREHOUSING CONSOLIDATION

Another example of our sharing administrative support is our joint warehousing project, also with the Department of Agriculture. We recently signed an agreement to conduct two pilot projects in Kansas City and Washington, D.C. These projects are designed to result in a large discount on space lease costs with projected savings over three years of $4 million. We are working with USDA to identify additional opportunities for shared administrative support.

GRANTS AND LOANS ADMINISTRATION

Finally, we are proposing to reappropriate $40 million from the Economic Development Assistance Program for the Grants and Loans Administration to fund closeout activities from fiscal year 1987 through 1991. The organization, to be located in the Office of the Secretary, will carry out residual activities associated with EDA, Trade Adjustment Assistance, Public Telecommunication Facilities Grants Projects, Federal Ship Financing Fund, and Fisheries Loan Fund.

These programs are proposed for termination in the President's 1987 budget. Certain activities will have to be continued, including loan and grant monitoring and closeout, protection of collateral, audit resolution, and debt collection. There are no monies for these activities proposed anywhere else in the department's budget request.

Our Inspector General, Sherman Funk, would like to present a short statement.

INSPECTOR GENERAL

Mr. FUNK. Mr. Chairman, I would like to have my statement entered for the record; I have a very abbreviated version here.

Mr. SMITH. All right.

Mr. FUNK. My budget before you holds steady our number of people, but requests an increase of $300,000 for a basic contracted audit program.

Since I became Inspector General in 1981, I have continued to add major new programs, without additional resources and without diminishing or degrading our other work. One example is the inspection program, where we send small teams to make unannounced reviews of some of the 800 Commerce facilities around the country. Agency managers welcome this, because it gives them an independent—and no more than week-old—assessment of their field operations.

Another example is our unusually comprehensive management audits, many of which result in significant changes, all the way from an outright cancellation of a program to its major alteration.

Because of the dramatically increased importance of computer systems in the Department, I established a new office staffed with highly skilled ADP auditors. One of their current projects is a joint effort with the OIGs of Defense and Transportation looking at the potential for consolidating systems development of all the nation's weather services.

I have also increased the payoff from our major fraud investigations by emphasizing the importance of civil litigation. In one recent case, the Justice Department on our behalf filed suit against a very large U.S. bank for $22 million, one of the first times that a bank has been sued by the Government for negligence in the handling of government assets.

Mr. Chairman, we have handled all of the above initiatives with no increase in our base FTE level. We have increased not our staff, but our productivity, and we have saved taxpayers' money.

Last year, we identified savings of more than $45 million. During the last five years, our work has resulted in savings which total $113 million more than the cost of our operations. But we can do more, and that is the reason for my request of an additional $300,000.

Commerce is now in the process of developing ADP systems valued at well over $2 billion in life cycle costs. At present, we quite literally have no funds for audits of such critical systems areas as contractor finances, accounting systems, progress payment requests or final contract settlement proposals. The increase I am requesting will allow us to contract with DCAA to audit these for us. I am confident that we will return savings at least eight times the small amount requested.

What I have tried to do, Mr. Chairman, is to manage our resources tightly, and to ensure that the taxpayers receive an outstanding return on their investment in the Office of Inspector General.

I solicit your support so that we can continue to provide that return. I will be pleased to answer any questions you may have.

[The statement of Mr. Funk follows:]

Formal Statement

STATEMENT BY

SHERMAN M. FUNK
INSPECTOR GENERAL
U.S. DEPARTMENT OF COMMERCE

BEFORE THE

HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE,
JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES

MARCH 21, 1986

Mr. Chairman and Members of the Committee,

I am here today to discuss the FY 1987 budget of the Office of Inspector General, a budget which holds steady our number of people, but which requests an increase of $300,000 for a basic contracted audit program.

Why, in the face of Gramm-Rudman-Hollings, am I requesting an increase? And why, as a practical matter, can't I offset such a relatively small amount by cutting elsewhere?

The blunt truth is that I have no "elsewhere."

Since 1981, I have continued to add major new program initiatives each year, without diminishing or degrading our other work. An example of this is our inspection program. What we do here is send a small IG team to make an unannounced inspection of one of the 800 Commerce facilities around the country and, on occasion, overseas. The team comes right back to brief me and then, within a few days, the agency head concerned. As a result, the senior agency people in the Department are getting a week-old independent assessment, good and bad, of their field operations. They get the kind of news which doesn't normally turn up in their own staff reports, and they welcome it. I established and maintain the inspection program with no additional people.

We are continuing to bring in many unusually comprehensive management audits which take a deep and hard look at core programs throughout the Department. This past year, for example, to evaluate the effectiveness of ITA's export activities, we sent an audit team to assess the work of the Foreign Commercial Service in four Southeast Asian countries, interviewed 120 U.S. exporting firms, and examined how ITA Headquarters and the ITA District Offices contribute to the overall export promotion effort. I also had teams reviewing NOAA's hydrographic charting operations, EDA's public works grants, NOAA's Fishery Management Councils, and much more. Many of our audits result in significant changes. This might be in the form of an outright cancellation of a program, as happened in the case of MBDA's Technology Commercialization Program, or of a redirection of a program, as happened in NOAA, where the agency agreed to use more shore parties in place of expensive ships for coastal charting. We are continuing these large-scale audits, with no increase in audit staff.

Because of the dramatically increased importance of ADP systems in the Department, I established a new office staffed with highly skilled ADP auditors. One of their key projects is a joint interagency review of weather services. Together with teams from the Defense and Transportation OIGs, we are looking at the potential for consolidating certain areas where there appears to be overlapping systems development. Here too, I created this new shop out of my existing base.

We increasingly see the fruition of our big fraud investigations. We have no welfare recipient programs in Commerce. My criminal investigations are mostly complex fraud cases, requiring careful analysis of thousands of checks and of a maze of accounting records. They tend to be extraordinarily labor-intensive. One result has been many criminal convictions of contractors, grantees and borrowers -- a good number of whom have received prison sentences and have had to pay stiff restitutions. We have had no increase in investigative staff.

We are also moving on the civil front, where this is appropriate. For example, last fall, the Justice Department on our behalf filed suit against a very large U.S. bank for 22 million dollars. To the best of our knowledge, this is one of the first times that a bank was sued by the government for negligence in the handling of government assets. We showed that the bank, in servicing its EDA-guaranteed loan to a steel company, had not adequately monitored the activities of that company, had not complied with the covenants of the guaranty agreement, and had not notified EDA when it learned of material changes in the company's financial condition. We believe, and the Justice Department agrees, that the bank purposely deceived the government.

This is an important, precedent-setting case. It puts the business and financial community on notice that the

Average Grade and Salary

	FY 1985	FY 1986	FY 1987
Average ES salary	$68,015	$67,951	$67,951
Average GS grade	10.88	10.86	10.86
Average GS salary	$39,143	$39,328	$39,328

Consulting and Related Services
(Dollar amounts in thousands)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$ 66	$103	$ 93
Management and professional services	236	45	45
Management Reviews of Program-Funded Organizations	179	37	37
Management and support services for research and development	24	...	...
Amount withheld from obligation pursuant to P.L. 99-190	...	-18	...
Total	$505	$167	$175

Consulting Services:

The Office of the Secretary is the general management arm of the Department and, as such, has a greater need for experts and consultants than other bureaus of similar size. The Office of the Secretary provides the principal support to the Secretary in formulating policy and in providing advice to the President. It provides program leadership for the Department's functions and exercises general supervision over the operating units. It also directly carries out program functions as may be assigned by the Secretary.

It would be neither feasible nor managerially sound to maintain large staffs of experts in the Office of the Secretary to handle the special duties or issues in which the Department participates. Many projects are temporary or experimental in nature, or may require intensive input only at their cutset, or are beyond the expertise of the existing personnel. In these cases then, it is in the best interest of the government for the agency to hire consultants and experts, and it is cost effective as well.

The personnel appointments or consultants in the Office of the Secretary in FY 1985 totalled 3,215 hours worked.

The outgrowth of the services received from these experts and consultants has proven beneficial in fostering the mission of the Department and in reducing the overall costs necessary for personnel services.

Management and professional services

Contracts were let for providing advice and recommendations concerning administrative management improvements.

Management Reviews of Program Funded Organizations

Contracts were awarded to provide audit analysis.

Management and support services for research and development

Contracts were awarded to analyze predominately foreign policy and related issues.

Periodicials, Pamphlets, and Audiovisual Products

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals..	$...	$...	$...	$...
Pamphlets..	2	2	2	2
Audiovisuals..	...	...	...	...

Pamphlets

Pursuant to 15 U.S.C. 1519, the Secretary of Commerce must make a report in writing to Congress giving an account of all monies received and disbursed by the Department. He must also describe the work done by the Department in fostering, promoting and developing the foreign and domestic commerce, the mining, manufacturing and fishery industries of the U.S., and make such recommendations as he shall deem necessary for the effective performance of the duties and purposes of the Department. The Office of Public Affairs is charged with fulfilling this mandate. In addition to the description and accomplishments of the Department and its various units, this report includes a directory of key officials, and a summary of employment and financing for the past year. The Department printed 2,000 copies in FY 1985 at a cost of $2,165.00

Appropriation Summary Statement

Appropriation: Special foreign currency program

The special foreign currency program establishes a basis for payments in foreign currencies which the Treasury Department determines to be excess to the normal requirements of the United States; for necessary expenses for the promotion of foreign commerce; and for scientific and technological research and development, as authorized by law.

government will no longer sit idly by and let its money be wasted.

However, this was only one of many instances where our office has saved taxpayers' money. In total last year, we identified savings of more than 45 million dollars. Overall, since 1981, we have identified savings amounting to 113 million dollars more than the cost of our operations.

But we can do more, and that brings me to my request for an additional $300,000.

The Commerce Department is now in the process of developing ADP systems valued at well over two billion dollars in life cycle costs. At present, we quite literally have no funds to request audits of such critical areas as contractor finances, accounting systems, progress payment requests, or final contract settlement proposals. We want the ability to contract with the Defense Contract Audit Agency to audit these for us. With the DCAA audits in hand, and in the light of our own reviews of these new systems, we will work with the contracting people to make sure that the government gets what it pays for. We are confident that we will return savings of at least eight times the $300,000.

In short, I do not have the funds elsewhere in my budget. What I spend goes essentially for people and travel; together, they make up about 94 percent of my operating budget. Without people, I can't audit, investigate or inspect. And without travel, simply by sitting in our offices, we can't smell out and identify criminal cases or wasteful projects.

What I have tried to do here, Mr. Chairman, is to show first, that we are already managing our resources as tightly as possible. To handle all of our new program initiatives, we have increased not our staff but our productivity. And second, I wanted to show that the taxpayers have received an outstanding return on their investment in the Office of Inspector General.

I solicit your support so that we can continue to provide that return.

I will be pleased to answer any questions you may have.

* * *

Mr. FUNK. I will be happy to answer any questions, sir.

SHARING OF USDA SERVICES

Mr. SMITH. Explain this sharing of USDA services.

Ms. BULOW. We are working with USDA in a couple of areas. One of them is instead of developing our own personnel system, we have contracted with them to provide the payroll function for the Department of Commerce.

Mr. SMITH. I am interested in what is involved. You say it is $86 per employee. What do you get for that? What does that involve? Is that all the paperwork connected with the employee or part of it?

Ms. BULOW. No. The way it works is the Department of Commerce continues to provide the data to the system, the payroll system in Agriculture. What Agriculture does then is to process the paycheck, and send it to Treasury for disbursement. They also have the personnel file, so when we transmit the information into the Agriculture payroll system itself, it bounces against the personnel file, which we also update from Commerce, and then processes the paychecks, so they do the processing for the paycheck and maintain the data bases for which we provide the input.

Mr. SMITH. This $86 is a yearly cost?

Ms. BULOW. That is a yearly cost per employee to pay them, a reduction from $140, which is what it is currently costing us with our existing system.

Mr. SMITH. Then you have some additional costs, but they are minimal.

Ms. BULOW. The way we have handled the conversion is that the personnel offices will be doing the data entry, so there are some systems costs, but minimal additional expenses, because we are shifting people from our consolidated payroll operation back into the bureaus, so there are no additional costs but, in fact, a $700,000 savings.

Mr. SMITH. How many checks does an employee get in a year?

Ms. BULOW. Twenty-six.

Mr. SMITH. Twenty-six.

Ms. BULOW. Every two weeks. And we have 34,000 employees, I believe.

Mr. SMITH. So in addition to the paychecks, that would be $3.50 per paycheck. But you get more than just the paychecks issued out of that?

Ms. BULOW. They give us the management information from their system.

FINANCIAL MANAGEMENT INFORMATION SYSTEM

Mr. SMITH. This $1.5 million to develop this Financial Management Information System: You say it will take five years?

Ms. BULOW. Yes, sir.

Mr. SMITH. What assurances are there that whoever comes into the Deparment after you will want the same system?

Ms. BULOW. I think, given the fact that the eight systems that are currently operating are in need of some improvements, and the key to this proposal is that the National Bureau of Standards and the National Oceanic and Atmospheric Administration are working with the Department, recognizing the need to make improvements in financial management, that even if I were to leave, I think the bureaucracy itself would like to see these improvements made, so we are working closely with them. We have $4 million in existing resources that are working on the effort. It is a departmentwide effort.

Mr. SMITH. What will your out-year costs be then?

Ms. BULOW. The out-year, the total system price is $32 million, of which approximately $22 million is in existing resources, so the total cost of additional funds is roughly $9.8 million. We will be coming up on an annual basis asking for funds to get us through the five years.

Mr. SMITH. After the five years is up, will there be a reduced cost to offset this?

Ms. BULOW. Our estimate is that running a centralized system will cost us $5 million. Currently, we are spending $10 million on the eight accounting systems, so we will have a $5 million savings per year when we are totally operational.

INSPECTOR GENERAL AUDIT INCREASE

Mr. SMITH. This $300,000 increase for audits: With declining program levels in the past three fiscal years, the Office of Audit and Investigations would have a declining workload, wouldn't it?

Mr. FUNK. No, sir, it doesn't work that way. In terms of the investigations, the preponderant effort goes into the EDA loans, EDA grants, and into the programs for which the monies have been spent quite some time ago. So there is no direct correlation with the current size of the budget. In terms of the reported size, as I indicated in my statement briefly, the Department is becoming a major procurement activity, which is something rather new to the Department of Commerce.

We have over $2 billion of new systems coming on stream, and we are getting involved in rather massive procurements in the Department. We need the backup from the Defense Contract Audit Agency to be able to get in early on, and look at the negotiations, comments of the Department, the system contract officers trying to identify areas and contracts that can be cut out and save money for the taxpayers.

INSPECTOR GENERAL RELATIONSHIP WITH THE SECRETARY

Mr. SMITH. Who do you report to?

Mr. FUNK. I report to the Secretary, sir.

Mr. SMITH. Directly to the Secretary?

Mr. FUNK. The Secretary and Deputy Secretary. I have my own legal staff, my own personnel staff, and I am in the General Administration part of the budget.

Mr. SMITH. Do you have any difficulty when you find something that you think needs to be corrected or something that is called to your attention? Do you have any difficulty getting to report directly to them?

Mr. FUNK. To the Secretary and Deputy Secretary?

Mr. SMITH. Yes.

Mr. **Funk**. No, sir, they have been very open. The job of Inspector General we define as straddling a barbed-wire fence, because we report to the Department and we also report to the Hill directly, and that is kind of a tenuous relationship. I believe that we walk it with care, but we do walk that line. I have had no difficulty at all in speaking candidly to the Secretary and Deputy Secretary, none whatsoever, sir.

Mr. **Smith**. I don't know if you are aware of the background. Some years ago some of us found that the Secretary—this was way back when Secretary Freeman was Secretary of Agriculture—wasn't getting some information he needed because the IG had to go through the very people.

Mr. **Funk**. And they were ignoring the reports.

Mr. **Smith**. They didn't want it reported. So we set up an Inspector General in Agriculture. From there we spread it to other departments. That is a key to it.

Mr. **Funk**. Yes, sir.

Mr. **Smith**. Being able to get this indepedence.

Mr. **Funk**. In a way, I am quite lucky, because Mr. Brown, Clarence Brown, the Deputy Secretary, was on the Government Operations Committee at the time the law was drafted in 1978, so he knows vividly and personally what the derivation of it is, going back to the whole Billie Sol Estes business in the '60s. I have a considerable degree of independence and this is carefully guarded by me and the Secretary and Deputy Secretary.

Mr. **Smith**. His father was on Government Operations.

WORKING CAPITAL FUND POSITION INCREASE

Now, from 1985 to 1986, you have an increase of 58 additional permanent positions associated with your Working Capital Fund. What are those 58 positions related to?

Ms. **Bulow**. The majority of the positions are legal staff for support of International Trade Administration programs. The monies for these lawyers would come from ITA and would be funded through the Working Capital Fund.

This past year this committee agreed to transfer the litigation attorneys from EDA into our General Counsel's Office, so they are funded through the Working Capital Fund. You also concurred with EDA personnel consolidation in the Working Capital Fund. Basically, the increases are derived from shifts within existing resources other than the program increases for ITA, and that covers the majority of the FTEs.

Mr. **Smith**. You have got 17 positions. What are those related to?

Ms. **Bulow**. The 17 positions reflect a program increase for ITA, there is a 1987 budget request before you for additional legal support in import administration and export administration. I would be happy to give the committee a total breakdown of all the puts and takes.

[The information follows:]

Insert 20a

The 1985 base was 728 permanent positions, of which 11 were unfilled at the end of the fiscal year. The increase from 728 to 792 is a net figure reflecting increases and decreases in specific activities and the transfer of positions from other accounts. The data below indicate the change in permanent positions beginning with FY 1986.

FY 1986

Transfers:

From: "Advances and reimbursements", General Administration +31

The legal function was originally established in the Advances and Reimbursements (A&R) account to enable the General Counsel to more efficiently service the various bureaus on an individual requirements level. Over time, the legal functions funded by A&R have become indistinguishable from those in the WCF. Therefore, the A&R function was merged with the WCF in order to operate more efficiently and to clarify billing procedures.

From: "Salaries and expenses", Economic Development Administration + 4

The transfer of four positions from the Economic Development Administration has been made in a continuing effort to consolidate administrative functions specifically in this case for Personnel Operations throughout the Department.

From: "Salaries and expenses", Patent and Trademark Office + 1

From: "Scientific and technical research and Services", National Bureau of Standards + 4

The transfer of one position from the Patent and Trademark Office and the four positions from the National Bureau of Standards has been made in a continuing effort to consolidate the purchase order system within the Management Service Center.

Other Increase:

Legal Services + 7

The increase of seven positions reflects an increase for General Counsel support primarily for the International Trade Administration (ITA).

FY 1986 Summary

Total FY 1986 Budget revised, composed of an increase of 7 FTE and a transfer of 40 FTE 775

FY 1987 Adjustments-to-base and built-in changes

Transfers:

From: "Salaries and expenses, "Economic Development Administration	+10

The increase of ten positions relects the transfer of the Litigation and Liquidation function from the Economic Development Administration to the Office of General Counsel. This move enables the Department to use more efficiently its available personnel resources, assures consistent Department positions on litigation matters, and enhances legal services by developing a core of expertise under the direct supervision of the General Counsel.

Other Increases:

Legal Services	+17

The increase of seventeen positions reflects a program increase for legal support for ITA. Specifically, nine positions will be used for increased support for Import Administration to carry out its statutory mandate under antidumping/countervailing duty, Foreign Trade Zone, steel quota agreements, and statutory Import Programs laws. In addition, eight positions will be needed for increased legal support for ITA in their effort to implement the provisions of the Export Administration Act of 1985.

Decreases:

Management Savings	-10

Management savings of ten positions and $300,000 result from administrative cost reductions and a proposal to contract out certain administrative functions.

FY 1987 Summary

Total FY 1987 Requirements includes a net increase of 7 FTE plus the transfer of 10 FTE	792

Mr. Smith. These, then, are not funded out of ITA?

Ms. Bulow. Yes, sir, the budget request is from ITA, and they are funded through the Working Capital Fund, so the only request for the money would be through the ITA budget. It is a funding mechanism.

Mr. Smith. You are not planning any RIFs or furloughs?

Ms. Bulow. No, sir.

Mr. Smith. How about reprogrammings?

Ms. Bulow. Not that I can think of.

Mr. Smith. You don't have any?

Ms. Bulow. No.

Mr. Smith. Thank you.

FRIDAY, MARCH 21, 1986.

ECONOMIC AFFAIRS/BUREAU OF THE CENSUS

WITNESSES

JOHN G. KEANE, DIRECTOR

C. LOUIS KINCANNON, DEPUTY DIRECTOR

JOSEPH P. BELLOMO, BUDGET OFFICER

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. Next, we have the Census Bureau.

[The justifications follows:]

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

Budget Estimates, Fiscal Year 1987
Congressional Submission

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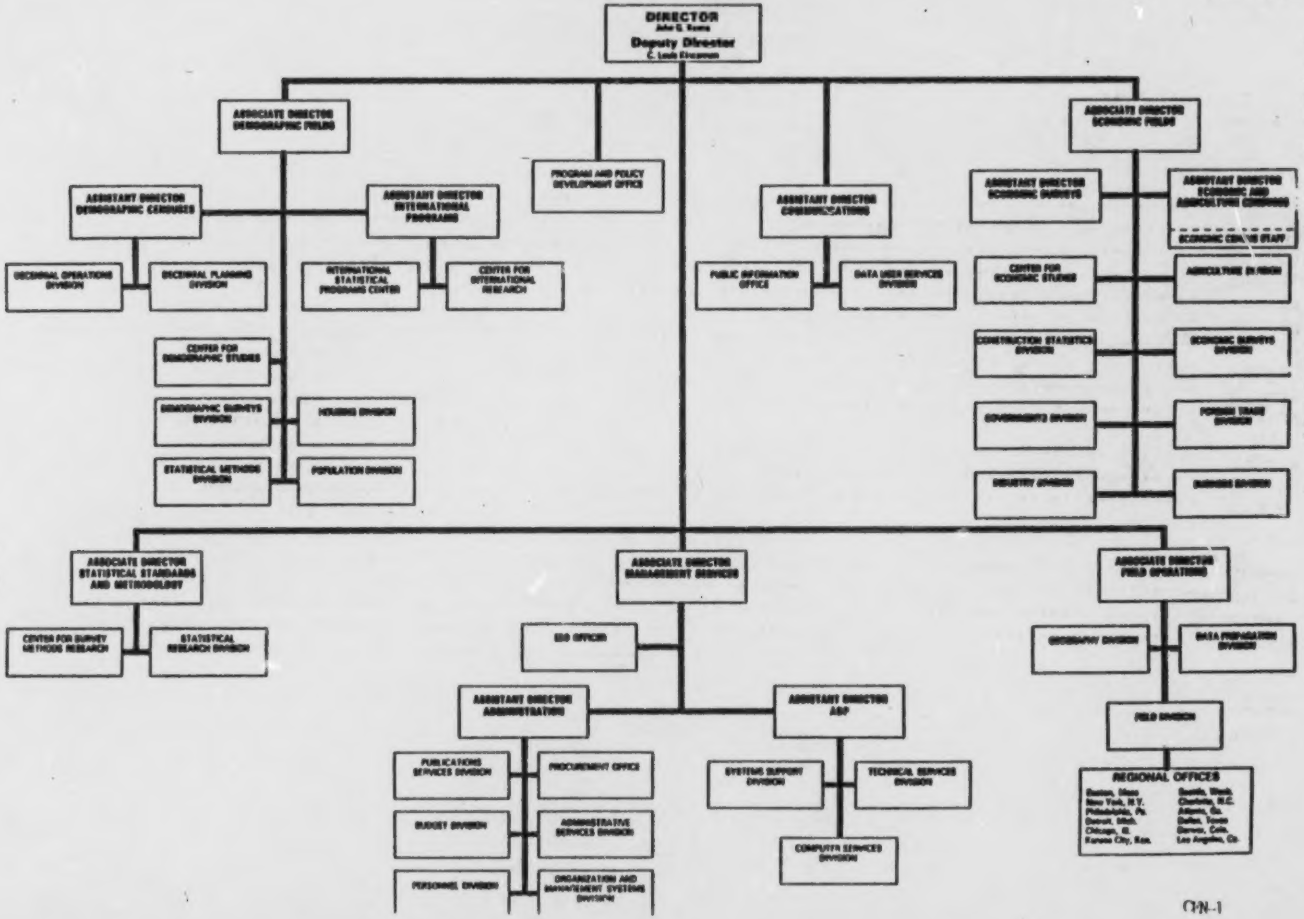
U.S. DEPARTMENT OF COMMERCE

Bureau of the Census

April 4, 1984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ASSOCIATE DIRECTOR DEMOGRAPHIC FIELDS
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ASSISTANT DIRECTOR COMMUNICATIONS
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Atlanta, Ga.
Dallas, Texas
Denver, Colo.
Los Angeles, Ca.

CN-1

General Statement

In its best interests, a civilized nation counts and profiles its people and institutions. Doing so ably and objectively is the abiding mission of the United States Census Bureau. We honor privacy, shun partisanship, invite scrutiny, and share our expertise globally. Striving to excel, we chronicle the Nation's past, describe its present, and illuminate its future.

Congress established the Bureau of the Census as a permanent bureau on March 6, 1902 (32 Stat. 51). Most of the authorizing legislation pertaining to the Bureau's statistical programs is encompassed in Title 13 of the United States Code. We conduct periodic censuses in the field of agricultue, population, housing, business, construction, manufactures, mineral industries, transportation, and state and local government operations. Continuing programs provide for geographic support and preparation of intercensal estimates of population and per capita income.

We also collect and publish current data for many areas covered by the censuses plus the official statistics on foreign trade. The statistical programs describe the changing structure and characteristics of the Nation's economy and population. The information is fundamental to the analytical and decision making processes of Government agencies responsible for monetary, work force, and other broad economic and social programs and policies. Census Bureau programs provide essential information for analyzing a wide variety of topics concerning economic conditions, population growth, dispersion and characteristics, education, housing, and state and local government activity. The data are fundamental to the efficient operation of private business, labor, and other organizations engaged in economic and social decision making. Census Bureau data are used for the apportionment of state legislatures, the determination of congressional districts, the distribution of billions of dollars from Federal programs, and decisions affecting all areas of American society. Comprehensive summaries of statistics are published in the Statistical Abstract.

The following summary provides a comparison between 1986 appropriations currently available and the 1987 estimate and related data on current employment:

	Appropriation Currently Available		1987 Estimate		Inc.(+) or Dec. (-)		Perm. Empl. 12/31
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Salaries and expenses................	2,279	$ 90,400	2,271	$ 91,675	-8	+$1,275	2,242
Periodic censuses and programs......	1,705	105,600	2,847	185,555	+1142	+79,955	1,648
Total.........................	3,984	196,000	5,118	277,230	+1,134	+81,230	3,890

Highlights of 1987 Request

The 1987 current program changes and 1987 periodic program activities are highlighted below.

Salaries and Expenses

We are proposing four program changes for 1987. The Current Economic Statistics activity contains increases to expand the coverage of the Service Annual Survey (SAS) and to provide for the improvement, maintenance, and extension of the expanded Harmonized System. These increases are offset by decreases in two program areas. In the Current Economic Statistics activity, the coverage of the Quarterly Financial Report is maintained at its 1984 level, and the annual survey used to update the Standard Statistical Establishment List is reduced.

Periodic Censuses and Programs

The 1987 budget reflects the cyclical requirements of the censuses and the continuation of other programs.

The economic, governments, and agriculture censuses will enter their third year of planning and preparation for the 1987 cycle. The Intercensal Demographic Estimates program will prepare population and per capita income estimates. The 1990 Decennial Census program will begin the fourth year of planning and testing activities. The Geographic Support program will complete the conversion to an automated system, and the Data Processing Systems program will continue activities designed to improve the Census Bureau's processing capabilities.

Appropriation Summary Statement

Appropriation: Salaries and Expenses

Government and business activities require a constant flow of accurate, timely, and relevant statistical data for economic and social policy formulation, allocation of scarce resources, and general planning and management. The programs of the Bureau of the Census provide a broad base of up-to-date economic, demographic, and social information used for all levels of decisionmaking by governments, private organizations, and individuals.

The current statistical programs provide diverse measures of the Nation's economy and the demographic characteristics of the population. In the economic statistics area, data are provided for retail, wholesale, and service trades; construction activity; manufacturing output and distribution; the economic impact of efforts to improve the environment; corporate financial statistics; imports, exports, and trade monitoring information; state and local government revenues, expenditures, debt, and employment; reports on Federal government expenditures; cotton reports; and general economic statistics. In the demographic statistics area, data are provided regarding the geographic distribution of the population; housing vacancies; composition of households and other characteristics such as income, mobility, and education; and international statistics. The remaining activities include the Statistical Abstract and various supplements, general research, and data systems development.

The frequency and content of current surveys and publications are maintained at a level which serves the most timely and important public needs.

A summary of proposed program changes is provided below:

Current service trade reports--The 1987 budget provides for the expansion of the Service Annual Survey (SAS) publication.

Standard statistical establishment list--The 1987 budget proposes a reduction in this line item of the General economic statistics subactivity. This decrease will result in a reduction in the number of companies and establishments canvassed and updated annually. This will reduce the currency of the mailing lists for most of the economic programs.

Quarterly financial report--The 1987 budget reduces coverage to the 1984 level.

Trade monitoring--The 1987 budget provides for revision of the import, export, and domestic output classification systems to promote comparability with the new international Harmonized System.

Appropriation Language and Code Citations:

1. For expenses necessary for collecting, compiling, analyzing, preparing, and publishing statistics, provided for by law, $91,675,000.

   13 U.S.C. 4, 6, 8(b), 12, 41-45, 61-63, 181, 182, 301-307;
   15 U.S.C. 1516; 19 U.S.C. 1484, 2354, 2393; 31 U.S.C 1104;
   44 U.S.C. 1343; 50 U.S.C. App. 2292.

13 U.S.C. 4 authorizes the Secretary to "perform the functions and duties imposed upon him by this title," or he may delegate any of them "to such officers and employees of the Department of Commerce as he may designate."

13 U.S.C. 6, 8(b), 12, 41-45, 61-63, 182, 301-307 provide for (1) acquisition of information from other organizations, public and private, (2) conducting joint statistical projects with nonprofit organizations or agencies, (3) conducting mechanical and electronic developmental work as needed, (4) collection and publication of statistics on cotton ginning, (5) collection and publication of statistics on fats and oils, (6) conducting current surveys on statistical subjects covered by periodic censuses, and (7) compilation and publication of information on imports, exports, and mode of transportation.

13 U.S.C. 181 provides that "the Secretary...shall annually produce and publish for each state, county, and local unit of general purpose government which has a population of fifty thousand or more, current data on total population and population characteristics and...shall biennially produce and publish for other local units of general purpose government current data on total population."

15 U.S.C. 1516 provides that "The Secretary of Commerce shall have control of the work of gathering and distributing statistical information naturally relating to the subjects confided to his department...He shall also have authority to call upon other departments of the government for statistical data and results obtained by them; and he may collate, arrange, and publish such statistical information so obtained in such manner as to him may seem wise."

19 U.S.C. 1484 provides that "The Secretary of the Treasury, the Secretary of Commerce, and the United States International Trade Commission are authorized and directed to establish...an enumeration of articles...comprehending all merchandise imported into the United States and exported from the United States, and shall seek...to establish the comparability thereof with such enumeration of articles."

19 U.S.C. 2354 provides that "Whenever the (International Trade) Commission begins an investigation...with respect to an industry, the commission shall immediately notify the Secretary (of Commerce) of such investigation, and the Secretary shall immediately begin a study of -

(1) the number of firms in the domestic industry producing the like or directly competitive articles which have been or are likely to be certified as eligible for adjustment assistance, and

(2) the extent to which the orderly adjustment of such firms to the import competition may be facilitated through the use of existing programs."

19 U.S.C 2393 provides that "The Secretary of Commerce and the Secretary of Labor shall establish and maintain a program to monitor imports of articles into the United States which will reflect changes in the volume of such imports, the relation of such imports to changes in domestic production, changes in employment within domestic industries producing articles like or directly competitive with such imports, and the extent to which such changes in production and employment are concentrated in specific geographic regions of the United States."

31 U.S.C. 1104 provides that "The President, through the Director of the Office of Management and Budget, is authorized and directed to develop programs and to issue regulations and orders for the improved gathering, compiling, analyzing, publishing, and disseminating of statistical information for any purpose by the various agencies of the executive branch..."

44 U.S.C 1343 provides that "In addition to the usual number of the Statistical Abstract of the United States, twelve thousand copies shall be printed: three thousand for the Senate, six thousand for the House of Representatives, and three thousand for distribution by the Secretary of Commerce."

50 U.S.C. App. 2292 provides authority to collect and report various types of census information required for emergency planning purposes.

Summary of Resource Requirements
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			2,279 (2,969)	$90,400
CEN-9	Adjustments to base and built-in changes:				
	Other increases	(3)	+$1,833		
	Other decreases	...	-110		
	Subtotal, adjustments to base and built-in changes			... (3)	+1,725
	1987 Base			2,279 (2,972)	92,125

Page No.	Comparison by activity:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) Dec.(-) over 1987 Base Perm. Pos.	Inc.(+) Dec.(-) over 1987 Base Amount
	Current economic statistics:										
CEN-12	Business statistics	322 (385)	11,493 (11,529)	324 (389)	12,322 (12,319)	324 (390)	12,580	328 (395)	$12,930	+4 (+5)	+$350 ...
CEN-17	Construction statistics	230 (255)	7,088 (6,962)	230 (255)	7,153 (7,151)	230 (255)	7,301	230 (255)	7,301	...	...
CEN-19	Manufacturing statistics	276 (280)	9,105 (9,206)	276 (280)	9,162 (9,160)	276 (280)	9,342	276 (280)	9,342	...	...
CEN-24	General economic statistics	241 (252)	8,723 (8,849)	230 (233)	8,869 (8,867)	230 (233)	9,021	207 (209)	7,621	-23 (-24)	-1,400
CEN-29	Foreign trade statistics	506 (512)	14,078 (13,911)	515 (529)	14,699 (14,696)	515 (531)	14,991	526 (544)	15,591	+11 (+13)	+600
CEN-34	Government statistics	150 (154)	4,866 (4,924)	150 (154)	4,822 (4,821)	150 (154)	4,910	150 (154)	4,910		
CEN-38	Agriculture statistics	10 (10)	388 (389)	10 (10)	391 (391)	10 (10)	398	10 (10)	398		
	Subtotal	1,735 (1,848)	55,741 (55,770)	1,735 (1,850)	57,418 (57,405)	1,735 (1,853)	58,543	1,727 (1,847)	58,093	-8 (-6)	-450

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-) over 1987 Base	
	Comparison by activity:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Current demographic statistics:										
CEN-39	Demographic surveys....................	312	$21,695	356	$25,968	358	$26,379	358	$26,379	...	...
		(710)	(21,303)	(924)	(25,962)	(924)		(924)			
CEN-42	Demographic reports....................	54	3,271	94	3,016	94	3,074	94	3,074	...	...
		(99)	(3,252)	(99)	(3,013)	(99)		(99)			
CEN-45	International statistics..............	30	1,178	18	613	18	630	18	630	...	...
		(32)	(1,176)	(20)	(613)	(20)		(20)			
CEN-46	Housing statistics.....................	9	541	9	539	9	545	9	545	...	...
		(9)	(538)	(9)	(539)	(9)		(9)			
	Subtotal..........................	445	26,685	479	30,134	479	30,628	479	30,628	...	...
		(850)	(26,269)	(1,052)	(30,127)	(1,052)		(1,052)		(...)	
	Other programs and publications:										
CEN-47	Statistical abstract and supplements..........................	32	1,457	32	1,488	32	1,579	32	1,579	...	...
		(34)	(1,435)	(34)	(1,488)	(34)		(34)			
CEN-48	General research.......................	18	691	18	686	18	696	18	696	...	...
		(18)	(678)	(18)	(686)	(18)		(18)			
CEN-49	Data systems development..............	15	685	15	674	15	679	15	679	...	...
		(15)	(670)	(15)	(674)	(15)		(15)			
	Subtotal..........................	65	2,833	65	2,848	65	2,954	65	2,954	...	...
		(67)	(2,783)	(67)	(2,848)	(67)		(67)		(...)	
	Total requirements......................	2,245	85,259	2,279	90,400	2,279	92,125	2,271	91,675	-8	-450
		(2,765)	(84,822)	(2,969)	(90,380)	(2,972)		(2,966)		(-6)	

NOTE: Permanent position amounts in parentheses represent total full-time equivalency. Dollar amounts in parentheses represent obligations.

Salaries and Expenses
Justification of Adjustments to Base and Built-in Changes
(Dollar amounts in thousands)

Other increases	Perm. Pos.	Amount
Full-year cost in 1987 of positions financed for part year in 1986	+3	+$39
Restoration of 5 percent pay reduction	...	+939
Within-grade step increases	...	...
Federal Insurance Contribution Act (FICA)	...	+5
Employees' Compensation Fund	...	+79
Health insurance premiums	...	+36
Intermittent benefits	...	+67
GSA space rental	...	+78
Federal Telecommunications System	...	+28
Postal services	...	+148
Printing and reproduction	...	+160
GSA extra services	...	+97
Working Capital Fund	...	+122
Supplies and materials	...	+37
Subtotal, other increases	+3	+1,835

An additional $39,000 is required in 1987 to cover the full-year cost of 1986 positions. These positions were lapsed at 25 percent. The funding required for full-year financing is calculated as follows:

Annual salary of new positions in 1986 request to Congress	12	$191
Less 5 percent lapse	-1	-10
Full year cost of personnel compensation	11	181
Personnel benefits at 11 percent	...	20
Full-year cost of personnel compensation and benefits	11	201
Personnel compensation and benefits included in 1986 request	-8	-162
1987 Adjustment to base	3	39

Consistent with the Administration's objective to reduce the deficit, the 1986 budget proposed a 5% reduction in Federal employee salaries. A portion of the proposed reduction was restored in 1986 by Congress. The balance of $939,000 is restored in the 1987 budget.

An increase of $376,679 is required to cover the cost of within-grade step increases. The computation is as follows:

Estimated number of within-grade step increases scheduled	741
Step increases not earned due to turnover	39
Average step above step 1 per separation	4
Average cost per within-grade step increase	$594
Gross cost of scheduled step increases	440,154
Less savings due to separations	-92,664
Subtotal, personnel compensation	347,490
Personnel benefits at 8.4 percent	29,189
Total cost	376,679
Amount absorbed	-$376,679

An increase of $5,000 is required to cover the cost of the Federal Insurance Contribution Act (FICA). The maximum taxable salary increased from $41,700 in 1986 to $43,200 in 1987.

The increase in the repayment to the Employees' Compensation Fund is the result of higher costs in the year ending June 30, 1985 than in the year ending June 30, 1984. The 1985 charges will be reimbursed to the Department of Labor, Employees' Compensation Fund in 1987 pursuant to Public Law 86-767, as amended.

The cost of the Government's contribution to the Federal Employees' Health Insurance premiums increased by 1.8 percent effective January 1, 1985. This percentage was applied to the $2,025,000 included in the 1986 Congressional Budget for a total increase of $36,450.

In accordance with the Federal Employees Part-Time Career Employment Act of 1978, P.L. 95-436, the Bureau of the Census is required to convert the appointment of certain current program intermittent employees to part-time status. Intermittent employees who work a minimum of 80 hours per month for three consecutive months were converted to part-time effective July 7, 1985. The additional costs of leave and benefits for part-time employees as compared to intermittent employees are computed as follows:

	Intermittent	Part-time
Numbers of positions affected	280	280
Hours worked (280 X 840)	235,200	235,200
Leave earned (280 X 44 hours)	...	12,320
Total hours on payroll	235,200	247,520
Total Salaries (hours X $6.97)	$1,639,344	$1,725,214

Benefits:		
Retirement (7%)	...	$120,765
Social security	$117,213	...
Medicare (1.45%)	...	25,015
Health benefits (2%)	...	34,504
Life insurance (.38%)	...	6,556
Subtotal, benefits	117,213	186,840
Total, salaries and benefits	1,756,557	1,912,054
Difference		+155,497
Less cost of time assigned to other work		-88,633
Total		66,864

The GSA has provided an estimate for 1987 for currently occupied space. The estimate of $5,846,000 for 1986 rent payments to GSA was subtracted from the 1987 estimate of $5,924,000 for rent payments to GSA for an increase of $78,000.

The increase in Federal Telecommunications System charges is based on a distribution of rates and charges as determined by the General Services Administration.

The increase in Postal Service charges is a weighted average of the postal increase of the past year. An increase of 9.5 percent was applied to the $1,562,000 in the 1986 Congressional Budget for a total increase of $148,390.

The cost of printing (both paper and labor) continues to increase. The increase is intended to offset a portion of the increase which has occurred in the past year and represents 6.5 percent of the $2,463,000 included in the 1986 estimate column of the 1986 Congressional Budget.

Contract labor rates and materials used by the General Services Administration to perform alterations and repairs have increased. Payments to GSA for after-hours services have also increased. An increase of 6 percent was applied to the $1,619,000 included in the 1986 estimate column in the FY 1986 Congressional Budget for an increase of $97,140.

The increase in the Working Capital Fund is the Bureau of the Census' share of increased costs for this service.

The increase in the cost of supplies is based on the GNP deflator in the President's 1986 Budget. The increase of 3.7 percent was applied to the $993,000 included in the 1986 estimate column of the 1986 Congressional Budget.

Other decreases

Management savings	-$110

These savings include a goal of reducing the cost of positions in grades 11-15 by $110,000. These savings may be achieved by improved overall position management or through other administrative cost reductions.

Justification of Program and Performance

Activity: Current economic statistics programs
Subactivity: Business statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		1987 Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Current retail trade reports.....	230	$7,923	230	$8,020	230	$8,189	230	$8,189	...	...
	(277)		(277)		(277)		(277)		(...)	
Current wholesale trade reports..	40	1,260	40	1,284	40	1,319	40	1,319	...	...
	(48)		(48)		(48)		(48)		(...)	
Current service trade reports....	21	1,216	23	1,913	23	1,945	27	2,295	+4	+$350
	(23)		(27)		(28)		(33)		(+5)	
Statistical sample improvement...	31	1,094	31	1,105	31	1,127	31	1,127	...	...
	(37)		(37)		(37)		(37)		(...)	
Total requirements...............	322	11,493	324	12,322	324	12,580	328	12,930	+4	+350
	(385)	(11,529)	(389)	(12,319)	(390)		(395)		(+5)	

Goals and Objectives

The goal of this subactivity is to provide current information about the Nation's distributive and service trade activity in total, for selected kinds of business, and for selected geographic areas.

The objectives of this subactivity are to maintain and improve the quality and timeliness of the information collected; to ensure the continued focus of the program on statistics relevant to national needs; to provide local data for community planning; and to provide businesses with data for determining and enhancing the effectiveness of their operations.

Base Program

Current retail trade reports--This program provides for monthly and annual estimates of retail sales, end-of-month inventories, and inventory/sales ratios. The monthly estimates consist of retail sales and inventories by detailed kinds of business for the United States, sales by major kind-of-business groups for the four regions and nine geographic divisions of the United States, and sales by limited kind-of-business categories for the 25 largest metropolitan areas (CMSA, MSA, or NECMA), 16 primary metropolitan statistical areas, and 19 large states. The surveys that produce the data for most of these estimates utilize a monthly sample of about 12,500 firms drawn from a universe of about 1,600,000 retail firms.

Preliminary sales estimates are available about 40 days following the reporting month, with final estimates available about 30 days later. Advance sales estimates for the United States, based on early reports from a subsample of approximately 3,000 firms, are provided about 9 working days after the data month for 12 major kind-of-business categories.

The annual portion of this program provides key measures of retail activity for intercensal years and provides the basis for benchmarking monthly estimates of sales and inventories. From a sample of about 31,500 firms, we develop data by kind of business for the United States. We compile Statistics on annual sales and year-end inventories, methods of inventory valuation, sales by legal form of ownership, accounts receivable balances, and cost of purchased merchandise. These estimates are available for use in the final estimates of the national accounts about 9 months after the reference year.

These surveys provide the Bureau of Economic Analysis (BEA) with sales and inventory estimates for computation of the national accounts. The Council of Economic Advisers, the Department of the Treasury, and other Government agencies concerned with monetary and fiscal policies use the estimates. State and local governments and businesses use the data as measures of consumer activity at the national and local level. Regional analysis is receiving increased attention by government and private industry as a measure of the effects of decisions on local areas. These data are particularly important to local areas in assessing the effect of adverse conditions such as weather, strikes, and resource shortages and in planning recovery from such conditions. Both large and small firms use the retail trade estimates in their marketing programs in order to determine market shares, to develop forecast models, and to measure past and potential changes in buying habits.

The advance monthly retail publication is designated as one of the Nation's principal economic indicators. Sales levels and trends from this report are highlighted regularly in the media including television newscasts and the financial pages of newspapers and magazines.

Current wholesale trade reports--This-program provides monthly estimates of wholesale trade sales, end-of-month inventories, and stock/sales ratios, along with annual estimates of sales, inventories, methods of inventory valuation, puirchases, sales/inventory ratios, and gross margins for merchant wholesalers by kind-of-business groups at the national level.

We derive estimates of sales and end-of-month inventories from an expanded monthly sample of about 3,500 merchant wholesaler firms, drawn from a universe of about 280,000. The estimates are now derived on a pre-LIFO basis instead of the cost basis used previously. Preliminary results are available about 40 days after the reference period, with final estimates available about 30 days later. The expanded annual sample of about 7,200 firms, available 7 months after the reference year, provides the basis for benchmark estimates of sales and inventories, including the collection and publication purchases inventory valuation data.

The Federal government uses the monthly and annual estimates of wholesale trade extensively to evaluate current economic conditions and to develop economic, fiscal, and monetary policies. The monthly sales and inventory estimates are leading economic indicators and provide timely input for computation of the national accounts. The annual programs provide the basis for updating the industrial input-output tables during intercensal years, and permit benchmark revisions to the monthly series. Comprehensive sales and inventory data also provide the basis for necessary major revisions to GNP estimates. In the private sector, businesses use the information to develop forecast models and measure changes in buying patterns.

Current service trade reports--This program provides information on selected services in the United States. The program includes estimates of receipts for major service groups (hotels and motels; personal services; automotive services; miscellaneous repair services; motion picture, amusement, and recreation services; and medical and legal services) plus selected detailed categories within these major groups. During 1985, we added estimates of receipts for business services; engineering, architecture and surveying services; accounting, auditing, and bookkeeping services; commercial education services, and arrangement of passenger transportation. During 1986, we will continue to expand the survey by including the seven industries comprising motor freight transportation and warehousing services. An annual Survey of Communications Services Industries was also started in 1986. Technological and structural changes in the communications industries, as well as policy favoring deregulation eliminated a primary source of statistical data.

This program provides an annual publication of selected service industries in the United States with summary statistics including limited kind-of-business detail for activities of major service groups and selected detail categories within the major groups. The survey represents about 90 percent of total nongovernment personal and business service activities and is based on a sample of 17,500 firms drawn from a universe of about 3 million personal and business service firms. This survey information is an important component of personal consumption expenditures aggregated by BEA for measuring consumer activity and computing the GNP. Private businesses use the data to project growth of the industry, to measure their own performance against the aggregate, and to plan for changing patterns in consumer activity. Government and private industry user groups will also use the additional data from the expanded coverage of the annual survey, especially the previously regulated areas such as transportation communications, and finance service sectors.

Statistical sample improvement--This program consists of research, development, and implementation of sample improvements covering current business surveys for retail trade, wholesale trade, and services industries. The process includes redrawing both area and list samples, reviewing other economic series and data relevant to trends in distributive and selected service trades, and making other quality improvements. These activities maintain or improve the quality of current survey estimates and provide the basis for research into more efficient methods of survey processing, with a view toward reducing both respondent burden and overall survey costs.

We schedule the implementation of sample maintenance, subsequent updates, and quality improvements on a quarterly and annual basis. These updates improve coverage of the business universe and ensure accurate representation for those firms selected in sampling when annual benchmarks are established for current survey estimates. These activities maintain current business survey information on the same classification basis and coverage as the most recent economic censuses, and they protect valuable economic time series derived from current survey estimates from extensive and costly revisions.

Operational and research support for current business surveys are based on recommendations from BEA, research findings from the Census Bureau's Statistical Research Division, recommendations from marketing associations and other private users, and analysis of the censuses compared to the current business surveys.

Census data provide benchmarks for the current business surveys and we reselect samples periodically to redistribute respondent burden. In 1987, we will introduce new list samples based on the reselection of small and medium-size firms in the current business surveys and update the large firms. We will use results of the 1982 Censuses and updates from the 1983 and 1984 Company Organization Surveys for the list sample reselection. Because of the updated measures of firm size and industrial classification, the new samples will yield more accurate estimates.

Other 1987 activities include a continuation of our automation plans for the collection, analysis, and processing of current business statistics. This automation will lead to more timely release of statistical information, enhanced accuracy of the data, and increased efficiency in survey operation. We will use computer-assisted data collection for telephone follow-up in some surveys. We also will continue reselection of the area sample to improve the estimates of retail sales and inventories and service receipts.

Increase for 1987

	1987 Base		1987 Estimate		Inc(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Current service trade reports......................	23 (28)	$1,945	27 (33)	$2,295	+4 (+5)	+$350

This proposal will expand the Service Annual Survey (SAS) publication to cover additional personal and business services. The service sector continues to be the fastest growing component in the Nation's economy. New technology is creating service industries that did not exist a few years ago, and deregulation is changing the way services are provided to business and consumers. At the same time, regulatory agencies are eliminating or severely reducing data collection programs.

Implementation of our expansion plans will add new industries that are covered only in the quinquennial census, and the publication of 15-20 additional 4-digit SICs that are now represented in the survey at the 2- or 3-digit SIC level. A number of these services, including residential care services, employment agencies, temporary help supply, and child day care services are among the fastest growing industries in the economy. For some areas now covered in SAS, such as computer services, a minor increase in collected items will provide multiple benefits at minimum cost for a clearer understanding of the volatile trends in these industries.

As new service activities are introduced into the economy due to technological improvements or legal changes, very little data exist to monitor the growth. The new service is classified with another related industry until sufficient growth is shown to justify a separate service industry classification. These heterogeneous groupings tend to have the largest overall growth rate, and the aggregate data measurements provide no useful information to gauge true growth of the emerging industry. This improvement will provide a series of brief one-time surveys of detailed subindustry activities that will identify and measure emerging service industries between economic censuses.

Previously, regulatory agencies were the sole source of data for the transportation sector. Deregulation reduced the amount of data for this sector. In 1986, we will start bridging this data gap by conducting the Motor Freight Transportation and Warehousing survey.

In 1987, we plan to expand coverage of the transportation sector to either collect more extensive data on the trucking industry and/or to begin covering additional transportation industries. Research in 1986 to evaluate data user needs and monitor the course of continuing deregulation will form the basis for our decision on 1987 coverage. The anticipated data items will be used to develop general economic indicators. The data are of the type generally available from existing company or establishment records, and will impose significantly less reporting burden than the detailed pricing-related data previously collected by regulatory agencies. Industries being evaluated for possible coverage include air and water transportation.

These data are needed for the computation of the national income and product accounts, input-output tables, estimates of capital stock and capital flows tables. Trade and professional associations use the information to better understand the volatile trends in their industries. Private business uses the data to improve growth projections for the industry, to measure their individual performance against the aggregate, and to plan for rapidly changing patterns in consumer activity.

The position and object class detail for this increase follows:

	Grade	Number	Annual Salary
Statistician	GM-13	1	$37,599
Programmer	GS-12	1	31,619
Statistician	GS-11	1	26,381
Statistician	GS-09	1	21,804
Total Salaries		4	117,403
Less lapse		-1	-29,351
Permanent positions		3	88,052
Positions other than permanent		2	51,948
Other personnel compensation		2	58,000
Total Compensation		7	198,000
Personnel benefits			27,000
Travel and transportation			7,000
GSA space rental			26,000
Communications, utilities, miscellaneous charges			14,000
Printing and reproduction			8,000
Other services			65,000
Supplies and materials			4,000
Equipment			1,000
Total			350,000

Activity: Current economic statistics programs
Subactivity: Construction statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Construction permits data........	72	$1,795	72	$1,829	72	$1,874	72	$1,874	...	...
	(80)		(80)		(80)		(80)		(...)	
Construction starts data.........	43	2,340	43	2,322	43	2,353	43	2,353	...	...
	(47)		(47)		(47)		(47)		(...)	
Construction value data..........	115	2,953	115	3,002	115	3,074	115	3,074	...	...
	(128)		(128)		(128)		(128)		(...)	
Total requirements...............	230	7,088	230	7,153	230	7,301	230	7,301	...	...
	(255)	(6,962)	(255)	(7,151)	(255)		(255)		(...)	

Goals and Objectives

The goal of this subactivity is to provide current data on economically and socially significant aspects of construction activity such as authorized construction, housing starts, characteristics and prices of new housing, and value of new construction put in place.

The objectives of this subactivity are to maintain and improve the accuracy, reliability, and timeliness of information collected; to ensure that data collected are the most pertinent to national economic and social needs; to maintain efforts to collect and provide information required for legislative and other planning purposes at national and local government levels; and to transmit timely information directly to state agencies.

Base Program

Construction permits data--This program provides monthly and annual data on the number and valuation of privately-owned housing units and nonresidential buildings authorized by building permits. We collect monthly information on buildings from 9,000 permit-issuing offices, and we obtain annual reports from the additional 8,000 permit-issuing offices. We publish monthly estimates of the number and valuation of authorized housing units for the United States, 4 Census regions, the 50 states, Puerto Rico, the more active MSAs & CMSAs, and 5,000 selected permit-issuing places. We publish Monthly nonresidential building permit data for the Nation, regions, states, and selected MSAs. Various elements of this program have become integral parts of the sample design for several Census Bureau surveys including the Survey of Construction and the Current Population Survey.

Information on permit authorizations is one of the components used to compile the monthly index of leading indicators. The Department of Housing and Urban Development, the Department of the Treasury, the Federal Reserve Board, and the Federal Home Loan Bank Board use the data for economic and fiscal planning and for measuring the changes in the cost of housing. Public policymakers at all levels use the data to determine whether housing program goals and objectives are being met. Banking and other financial institutions use the data for estimating mortgage demand.

Companies involved in the production and distribution of building materials, appliances, furnishings, and other consumer durables related to residential construction use the data for market planning, material use, and investment analysis. Planning agencies at the state and local levels use detailed building permit statistics for local area planning and economic development.

Construction starts data--This program provides monthly statistics on the number of housing units started and the number of housing units authorized (but not yet started) for the country as a whole and the 4 Census regions (northeast, midwest, south and west), national data on ownership and number of units. Data originate from a sample of approximately 41,500 buildings. This program also collects information, in conjunction with the Department of Housing and Urban Development, on the completion and sale of new housing units.

Information on housing starts is a principal economic indicator. The statistics have a wide range of users. The Department of Housing and Urban Development and the Congress use the data to develop and evaluate housing programs. The Council of Economic Advisers, the Federal Reserve Board, the Office of Management and Budget, the Bureau of Economic Analysis, and others use the data to determine the condition of the economy. Manufacturers of building materials use the data to plan production schedules and establish market shares. Banking and other financial institutions use the data to estimate mortgage demand. The data provide estimates of the value of new residential construction expenditures for national income accounting.

This program also provides for the development and publication of quarterly and annual price indexes of residential construction based on financial and physical characteristics data collected in the sample survey. A number of Federal agencies use the indexes to accurately measure changes in the cost of new housing; the Bureau of Economic Analysis derives constant dollar series for important components of the Gross National Product; and, insurance companies and financial institutions adjust rates and establish replacement costs based on the indexes.

Construction value data--This program provides monthly, national estimates of the dollar value of new construction put in place by type of construction. The categories include residential and nonresidential buildings as well as nonbuilding construction such as highways and reclamation projects. Monthly surveys provide data for state and local and most privately-owned construction. A sample of about 17,500 construction projects is selected from a universe of about 190,000 projects. We develop estimates of construction outlays for the remaining types of construction (except Federal) by using a variety of indirect measurements, analytical techniques and secondary data sources. We obtain Federal construction expenditures directly from various agencies.

This program also provides quarterly data on expenditures by owners of residential property for upkeep and improvement. Data on additions and alterations provide an important component of the estimate of the total value of new construction put in place. We release limited geographic and type-of-expenditure data on an annual basis. The annual estimates include information on the type of work, the characteristics of the property such as value and age of the structure and selected characteristics of the property owners. We base the quarterly estimates on a sample of 2,400 rental properties and 5,400 owner-occupied housing units in the Consumer Expenditure Survey.

Estimates of the value of new construction put in place provide data to measure the gross private domestic investment component of GNP. The Council of Economic Advisers, the Office of Management and Budget, the Federal Reserve Board, and other Government agencies use these data to determine fiscal policy. The private sector, especially companies that provide materials for nonresidential buildings, highways, bridges, and other heavy engineering construction, uses these statistics for market planning, production scheduling, and investment planning.

Activity: Current economic statistics programs
Subactivity: Manufacturing statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Current industrial reports.........	122 (123)	$3,984	122 (123)	$4,004	122 (123)	$4,290	122 (123)	$4,290	... (...)	...
Annual survey of manufactures......	74 (75)	2,174	74 (75)	2,190	74 (75)	2,333	74 (75)	2,333	... (...)	...
Industrial indicators and statistical measurement...........	45 (46)	1,687	45 (46)	1,697	45 (46)	1,893	45 (46)	1,893	... (...)	...
Special industrial characteristics.	35 (36)	1,260	35 (36)	1,271	35 (36)	826	35 (36)	826	... (...)	...
Total requirements.................	276 (280)	9,105 (9,206)	276 (280)	9,162 (9,160)	276 (280)	9,342	276 (280)	9,342	... (...)	...

Goals and Objectives

The goal of this subactivity is to provide current statistics measuring the overall performance of the manufacturing sector.

The objectives of this subactivity are to maintain and improve the quality and timeliness of the statistics and to continue their focus on the most pertinent national needs; to provide monthly data on the manufacturing sector as an aid to Government policymakers and business economists in their analyses of the business cycle and for monitoring the effect of imports on domestic production; and to provide continuing annual data at the national level on major labor, capital, and manufacturing material inputs and outputs.

Base Program

Current industrial reports—This program includes about 60 annual, 12 quarterly, and 30 monthly surveys. These surveys include detailed information on the physical quantity or value of production, shipments, stocks, and/or consumption of individual commodities. We collect data by mail from samples that include about 44,000 manufacturing units selected from a universe of about 350,000 establishments. This program produces about 100 different reports, and it uses a unified data collection, processing, and publication system. Fourteen of these surveys receive supplemental funding from other sources to obtain greater frequency or to collect supplemental information. We conduct fourteen additional surveys on a completely reimbursable basis. At the end of calendar year 1985, the 100 different surveys covered over 5,000 products and more than one-third of the approximately 2 trillion dollar value of shipments of all manufactured goods. These surveys measure activity in specific commodity areas such as cotton consumption, apparel production, and steel inventories. Products include most of the major 2-digit, manufacturing industry groups of the Standard Industrial Classification (SIC) system.

The law specifically requires seven of these surveys on a monthly basis. We combine the results from these surveys and issue them in the following three monthly publications: Fats and Oils--Oilseed Crushings; Fats and Oils--Production, Consumption and Stocks; and Consumption on the Cotton System and Stocks.

Most of the reports provide information that compares domestic production or shipments with comparable data from trade statistics on imports and/or exports. These data have assumed increasing importance to the International Trade Administration, the Bureau of Labor Statistics, and the Bureau of Economic Analysis, and the Office of Textiles and Apparel in meeting their responsibilities under the Trade Act of 1974. The comparability work is funded under the Foreign Trade Statistics subactivity (Trade Monitoring line item.)

In an effort to improve the usefulness of our current economic statistics, we are revising the SIC-based output classification system to make our production statistics more comparable with the new Harmonized System-based import and export classification systems. We will fully implement collection of current statistics on the revised basis during 1987.

We update the survey panels for most reports annually and benchmark estimates or reconcile them to the results of the broader-based Annual Survey of Manufactures (ASM) and Census of Manufactures. We update the content of each survey periodically and add or drop surveys from the program to reflect current needs of the Government and industry based on discussions with industry representatives and other data users. In 1985 an annual survey of robots was added to the CIR, and we made significant changes to the annual computer and electronic surveys to provide policymakers with additional product information.

Because the surveys typically measure the output of individual products, they provide analysts in the private sector with detailed information that is useful for evaluating the changing relationship between their companies and the industry. The data also are used widely in assessing business conditions and in planning future operations.

The Federal Reserve Board uses current commodity data to prepare the monthly index of industrial production and the BEA uses the information to prepare quarterly estimates of GNP. Other Government agencies such as the Department of Agriculture, the International Trade Administration, the Bureau of Mines, and the Department of Energy also use the current industrial reports to meet their data needs.

Annual survey of manufactures--This program supplies the key measures of manufacturing activity for intercensal years in terms of basic economic measures. The data items include input data such as employment, payrolls, supplementary labor costs (fringe benefits), cost of materials, and fuels consumed; and output data such as shipments by industry and product class and shipments for export. Other major industrial measures include inventories by stage of fabrication; gross book value of assets, capital expenditures and retirements; and depreciation of capital assets. National estimates provide 20 2-digit, 134 3-digit, and 450 4-digit industry classifications as defined in the SIC for about 1,500 product classes. In addition, we compile the more basic statistics such as employment and value of shipments for states. The annual sample includes about 60,000 establishments selected from the total universe of about 350,000 establishments.

The industrial detail of the Annual Survey of Manufactures (ASM) and the 5-digit product class information have extensive uses in the private sector and throughout the Government. For example, the 4-digit industry detail is essential to the calculation of the Department of Labor's annual productivity series. Similarly, the industry data are used for periodic adjustments to the Federal Reserve Board's Index of Industrial Production, and the BEA uses the data for the annual update of the GNP. Without these data, the GNP estimates for producers' durable equipment and other categories would seriously deteriorate in quality. The industry data and the 5-digit product class data are used as weights for the GNP deflators; the Bureau of Labor Statistics uses these data to update wholesale price indexes and to calculate weights when new components are added to the indexes; the Department of Commerce's annual publication, Industrial Outlook, which provides an evaluation and forecast of future industrial activity, uses ASM industry and product class data extensively, as well as other information from the Census Bureau's current industrial reports, other Government agencies, and private sources. The International Trade Administration uses the origin of export data to design and evaluate export development programs.

Industrial indicators and statistical measurement--The Survey of Manufacturers' Shipments, Inventories, and Orders provides the primary indicators of current changes and trends in industrial activity. Monthly data include the dollar volume of shipments, new and unfilled orders, and total inventories for 45 industry categories from about 4,100 reporting units. The program also provides inventories by stage of fabrication for 16 broader industry groups. Separate data show household durables and the defense and nondefense portions of the capital goods industries.

We provide advance estimates of shipments and orders of durable goods about 20 days after the end of the month with preliminary estimates of all data about 10 days later. The shipment figures provide information of the current level of manufacturing activity while figures for new and unfilled orders and changes in levels of inventories provide indicators of future trends. The most recent ASM provides an annual benchmark for shipment and inventory estimates.

This monthly report for all manufactures is one of the Nation's principal economic indicators. The shipments data are an important coincident indicator, and new orders and inventories are important leading indicators. The Council of Economic Advisers, the Department of the Treasury, the Department of Commerce, and the Federal Reserve Board use the data to analyze economic conditions, to forecast future trends, and to determine current economic policy. The data also provide input to the quarterly estimates of GNP, the index of industrial production, and the Department of Commerce's index of leading indicators. The information is highlighted regularly in the Wall Street Journal and in the financial pages of other newspapers and magazines. Private economic and market research organizations, investment organizations, and individual manufacturing and nonmanufacturing companies use the data to formulate plans for a wide range of decisions.

This program also includes projects for improving statistical measures of industrial activity, for improving access to industrial data for use in special studies and analysis, and for evaluation of the eoconomic quality and content of industrial surveys. We have placed recent measurement improvement emphasis on better methods for measuring the level of business inventories and their changes, and we have developed and implemented revised methods for collecting inventory data. Other measurement improvement projects include the measurement and benchmarking of unfilled orders, the measurement of expenses for the leasing of capital equipment, and analysis of cyclical movement in monthly M3 series to identify possible new series for the BEA to use in their economic indicator program.

We are conducting two major activities to improve access to industrial data in cooperation with the Center for Economic Studies (CES). One of these activities is maintenance and use of the Longitudinal Establishment Data file for special studies and analysis. This is a file of census and ASM data constructed in the form of a time series for each manufacturing plant included in the census or ASM sample since 1972. Access to this file greatly expands the usefulness of data, the servicing of user requests, and assures the confidentiality of the individual company data.

The second activity focuses on the Annual Survey of Research and Development (R&D) sponsored by the National Science Foundation. This activity will result in more analysis of the factors that encourage R&D work by industry, as well as the economic benefits derived from R&D.

Evaluation of the economic quality and content of industrial surveys is an important part of the work done on all surveys in this subactivity. The result is objective and relevant industrial statistics for assessment of the industrial sector, national economic accounting, and economic policy decisions. This activity requires a staff with thorough knowledge of principal economic indicators produced by the Government and the extensive economic statistics programs of the Bureau of the Census, Bureau of Labor Statistics, Bureau of Economic Analysis, and the Federal Reserve Board.

Special industrial characteristics—This program includes surveys on pollution abatement expenditures by manufactures; utilization of industrial capacity; and manufacturers' shipments to the Federal Government. These surveys of special industrial characteristics are of major concern to Federal, state, and local agencies and the private sector.

The annual Survey on Pollution Abatement Expenditures provides for the development of comprehensive estimates of capital expenditures and operating costs associated with pollution abatement activities by manufacturers. We collect the basic information from a subsample of the ASM consisting of about 20,000 establishments with 20 or more employees. We collect separate data for capital expenditures and types of operating costs associated with the abatement of air and water pollutants and solid waste disposal. The survey includes payments to governments for pollution removal, as well as information on the volume of air, water, and solid waste pollutants removed as a result of pollution abatement activities.

Nationally, these data cover over 400 manufacturing industries (4-digit SIC); this includes all manufacturing industries except apparel. State-level data include major industry groups (2-digit SIC); and industry totals for major MSAs.

The eleventh annual report of the Council on Environmental Quality estimated a national expenditure of $518.5 billion in the 10-year period from 1979 through 1988 to comply with current environmental measures. The magnitude of these expenditures requires reliable estimates of industrial pollution abatement costs to evaluate the overall economic effect of the national commitment to clean up our environment.

Federal agencies such as the Bureau of Economic Analysis, International Trade Administration, the Environmental Protection Agency, the Federal Reserve Board, and the Council on Environmental Quality use these survey statistics. State and local governments and industrial organizations use the data to develop economic and environmental forecasts and to evaluate the effect of environmental legislative proposals.

The annual Survey on the Utilization of Industrial Capacity relates the actual level of manufacturing activity to the preferred and practical levels of operation. The survey includes selected characteristics of manufacturing establishments such as number of shifts worked and reasons for operating at less than preferred capacity. We obtain the information from a subsample of the ASM consisting of about 9,000 establishments. Capacity utilization rates cover 4-digit SIC industries at the national level and all other capacity utilization characteristics at the 2-digit level.

Inflationary pressures, business investments, and economic growth are areas of major economic policy concern. Government agencies and the private sector use the establishment-based capacity utilization estimates to follow or estimate how changes in utilization rates affect these important economic factors.

The Federal Reserve Board uses the data to benchmark their current estimates of company capacity utilization. A number of agencies use the data in their evaluation of industry's ability to expand and meet a crisis, particularly in defense-related industries.

Changes in Federal Government procurement--especially expensive and long lead time military procurements--can have a pronounced effect on overall manufacturing activity. The Survey of Manufacturers' Shipments to the Federal Government provides general purpose statistics that are used in measuring the effect of government procurement on selected industries and geographic areas. The survey has a 5-year data collection cycle with a limited number of defense-oriented industries (about 850 establishments) surveyed each year between the census of manufacturing (years ending in 2 and 7). For the year covered by the census of manufacturing, the survey will include approximately 100 industries (about 8,000 establishments) that engaged most extensively in business with the Federal Government.

Activity: Current economic statistics programs
Subactivity: General economic statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amoun
Standard statistical establishment list................	140	$4,770	140	$4,852	140	$4,937	117	$3,937	-23	-$1,000
	(142)		(142)		(142)		(118)		(-24)	
County business patterns............	23	918	23	936	23	956	23	956	...	...
	(23)		(23)		(23)		(23)		(...)	
Industry & commodity classification.	12	536	12	544	12	557	12	557	...	...
	(13)		(13)		(13)		(13)		(...)	
Economic studies....................	8	450	8	454	8	456	8	456	...	...
	(8)		(8)		(8)		(8)		(...)	
Quarterly financial report..........	58	2,049	47	2,083	47	2,115	47	1,715	...	-400
	(66)		(47)		(47)		(47)		(...)	
Total requirements..................	241	8,723	230	8,869	230	9,021	207	7,621	-23	-1,400
	(252)	(8,849)	(233)	(8,867)	(233)		(209)		(-24)	

Goals and Objectives

The goals of this subactivity are to provide a centralized list of all United States business firms and their establishments; to provide uniform industry and commodity classification and coding; to publish County Business Patterns data; and to provide corporate financial statistics.

The objectives of this subactivity are to maintain and update the Standard Statistical Establishment List (SSEL); to coordinate the development, maintenance, revision, and evaluation of industry and commodity classification and coding program; to maintain and improve the quality of the data; and to continue to focus on data pertinent to national needs.

Base Program

Standard statistical establishment list--The SSEL includes information on all employer firms in the United States. It includes all establishments and shows the latest information available on name, mailing address, physical location, industrial classification, size classification, company affiliation and legal form of organization. The program provides a single source for determining and assigning industrial classifications to establishments and companies. The SSEL provides a common frame of reference for use in selecting statistical samples of establishments and companies. Preparation of the SSEL reflects the continued coverage of multiple establishment businesses based on the Company Organization Survey.

The program provides for a complete annual mailing to multiple establishment businesses with 50 or more employees. Smaller companies are divided into three panels, and each panel is covered once during a 3-year period. The program includes efforts to update industrial classifications for small businesses and the annual determination of the business universe via compilation of administrative records covering single establishment companies, the incorporation of changes in company organization along with geographic and industrial classification codes on a periodic basis, and the preparation of the updated universe file for statistical users of the system. These users include the County Business Patterns (CBP) program, the Annual Survey of Manufactures program, the monthly and annual surveys of retail and wholesale trade, as well as programs conducted in connection with the economic censuses.

We are taking steps to integrate the Current Industrial Reports program with the SSEL. The objectives of this integration are the same as with interagency programs, i.e., the elimination of duplicate requests for data, the immediate recording of data and structural changes obtained from current programs, and the use of an updated sampling frame for selecting mailing lists for current programs.

We purchase quarterly and annual payroll data (including the total compensation item) and March 12 pay period employment from the Internal Revenue Service. These data serve as proxy for millions of small firms and excuse them from direct reporting to the Bureau.

County business patterns--This program consolidates selected data from the SSEL to provide summary totals for the universe of establishments at the 4-digit SIC level. The CBP program provides annual employment, payroll, and establishment data for each county and state, including Puerto Rico. CBP is a standard reference source of small area data for government, businesses, market researchers, and industrial and civic planners.

CBP data are especially useful for analyzing market potentials; determining the location and size of sales territories; establishing sales quotas and advertising budgets; and locating production, marketing, and service facilities. The CBP program is instrumental in establishing quality sampling frames, since the summary totals indicate how well a particular sample represents the universe.

CBP data have a wide range of private and government users including agencies such as the Office of Personnel Management; the Departments of Defense, Energy, Agriculture, and Housing and Urban Development; the Bureau of Labor Statistics; the Small Business Administration; and the Bureau of Economic Analysis. They use the data to determine location and concentration of establishments and employment; to develop regulations on occupational safety and health standards; to determine employment concentrations and trends by industry so disabled employees can be guided into appropriate industries; and to obtain small area statistics that are needed for administering Federal, state, and local government funding for programs aimed at the improvement of the economic sector in urban areas.

CBP is the only source of 4-digit SIC detail at the county level covering data for almost all economic activities. This level of detail provides an accurate accounting of the kinds of businesses that are located in a geographic area so that comparisons can be made with other similar areas. Local planners can then determine the kinds of business needed in their area for improved economic growth.

We provide tabulated data at the state and county level both in the publication and on tape or diskette format.

Industry and commodity classification—This program includes both review and participation in the development of industry classification, report forms and coding procedures. This process assures that Census Bureau operations are complete, consistent and comparable with Office of Management and Budget and other agency standards. We are represented on the Standard Industrial Classification Technical Committee; this committee coordinates industry classification with OMB and other Government agencies. The program provides answers to general inquiries and serves as a focal point in interpreting the various systems used by the general public. We prepare coding manuals and develop procedures for coding report forms that are problems in more than one Census area or do not belong in the area for which they were mailed. We also develop classifications, report forms and procedures for coding establishments that are not in the scope of the economic censuses, and thus, not covered by any other Census Bureau program.

The program responsibility includes review and participation in the coordination of efforts to develop, maintain and revise production, export, and import classifications. As a corollary to such activities, the program provides research on the various classification and coding problems, evaluation studies and a continuing effort to improve the classification systems and coding methods. The Trade Act of 1974 recognized the importance of the resulting data relationships by mandating the development of an enumeration system that provides comparability among United States import, production and export data. The experience and expertise developed for this program provide the basic systematic knowledge and commodity correlations that are needed to meet the additional requirements for commodity comparability.

We produce an annual report, U.S. Commodity Exports and Imports as Related to Output. The report compares the statistics on U.S. exports of domestic merchandise, imports for consumption and domestic output in terms of the Standard Industrial Clasification (SIC). In relating export, import and production classifications, the program provides correlations among systems and data relationships that are not available from any other source.

A quarterly report entitled, Trade and Employment, compares imports and domestic employment in terms of the SIC.

We publish the data in the Trade and Employment Program as a joint quarterly publication with BLS. The Bureau of the Census will provide the programs necessary to generate the publications and BLS will supply the related employment data. This agreement will continue in subsequent years.

The Trade and Employment Program reflects changes in the volume of imports into the United States; the relationship of such imports to changes in domestic production; changes in employment within domestic industries producing articles like or directly competitive with such imports; and the extent to which such changes in domestic production and employment are affected adversely because of changing international trade patterns.

Additional reports include U.S. Foreign Trade Statistics and Schedule B - Statistical Classifications of Domestic and Foreign Commodities Exported from the United States. The first includes all classifications and correlations used by the Census Bureau to compile and publish data on foreign trade, while the second provides the classification reporting schedule used to assign codes to all shipments of commodities exported from the United States. Data users include researchers in private industry, colleges and universities, and other Government agencies including the Bureau of Labor Statistics, Bureau of Economic Analysis, Bureau of Mines, Department of Agriculture and the International Trade Administration. We publish other publications and technical papers, as needed.

Economic studies--The Center for Economic Studies provides support for the Census Bureau's economic measurement activities with a program of analysis and research that results in improved and better known quality of the economic measures. The program also provides industrial data in forms conducive to analysis and research by economic policymakers and researchers.

We identify and select particular measurement issues based on their quantitative importance and susceptibility to resolution with available econometric and analytic methods. Increased use of economic data for analytic and research purposes will substantially increase our knowledge of the limitations of the data, and it will allow us to improve economic measurement and analysis activities.

We attempt to accomplish objectives wherever possible by small contracts with outstanding researchers to collaborate in studies that use our computational facilities to access and analyze economic data bases. We also engage in investigations to improve the software used for processing and analyzing economic data.

We will be studying the relationship of the data reported by manufacturers and information compiled for other economic sectors, patterns and changes in economic structure, the linkage of corporate financial tax data with census establishment data, and improvement in the techniques used for cost index preparation.

Quarterly financial report--This program collects and reports current information on corporate financial statistics. The Quarterly Financial Report (QFR) is used in the construction of a variety of statistical indicators. For example, BEA uses the information to construct the National Income and Product Accounts and related quarterly information. The report also has a variety of other purposes, including: (1) the Federal Reserve Board's flow-of-funds accounts, (2) analysis of small business conditions, and (3) analysis of corporate profits.

The QFR provides data on financial statistics including sales, profits, assets, liabilities, stockholder equity and related accounts and ratios. We collect the data quarterly from a sample of about 14,000 companies in the manufacturing, mining, wholesale and retail sectors of the economy.

Decreases for 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Standard statistical establishment list........................	140 (142)	$4,937	117 (118)	$3,937	-23 (-24)	-$1,000

The decrease will result in a reduction in the number of companies canvassed (90,000 to 28,000) and updated annually. The corresponding reduction in terms of number of establishments covered will be a decrease from 950,000 to 700,000. This will reduce the currency of the mailing lists (particularly the smaller companies) for most of the economic programs.

The position and object class detail for the decrease follows:

	Number	Annual Salary
Permanent positions	-23	-$586,000
Positions other than permanent	-1	26,000
Other personnel compensation	...	0
Total compensation	-24	-612,000
Personnel benefits		-58,000
Travel and transportation of persons		-4,000
GSA space rental		-93,000
Communications, utilities and miscellaneous charges		-136,000
Printing and reproduction		-13,000
Other services		-56,000
Supplies and materials		-27,000
Equipment		-1,000
Total		-1,000,000

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Quarterly financial report	47 (47)	$2,115	47 (47)	$1,715	... (...)	-$400

The decrease provides for coverage of the QFR at the 1984 funding level. In 1985 and 1986 improvements in the small business data were studied and partially implemented. With this decrease, continued implementation of these improvements will not be pursued.

The position and object class detail for the decrease follows:

	Number	Annual Salary
Permanent positions	...	-$180,000
Positions other than permanent	...	-179,200
Personnel benefits		-40,800
Total		-400,000

Activity: Current economic statistics programs
Subactivity: Foreign trade statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Import statistics................	268	$7,220	273	$7,660	273	$7,822	273	$7,822	...	...
	(275)		(286)		(287)		(287)			
Export statistics................	192	5,431	195	5,611	195	5,721	195	5,721	...	...
	(192)		(197)		(198)		(198)			
Trade monitoring.................	46	1,427	47	1,428	47	1,448	58	2,048	+11	+$600
	(45)		(46)		(46)		(59)		(+13)	
Total requirements...............	506	14,078	515	14,699	515	14,991	526	15,591	+11	+600
	(512)	(13,911)	(529)	(14,696)	(531)		(544)		(+13)	

Goals and Objectives

The goals of this subactivity are to provide current United States statistics on imports and exports of all types of merchandise and commodities including the mode of transportation.

The objectives of this subactivity are to maintain and improve the dependability and timeliness of the official United States export and import statistics; to implement improved data collection procedures, wherever feasible; to streamline, simplify, and reduce the reporting process to the maximum extent possible; and to conduct activities required by the Trade Act of 1974 and the Trade Agreements Act of 1979.

Base Program

Import statistics--We compile monthly statistics from copies of official documents filed with the U.S. Customs Service. Processed data cover 100 percent of formal entry shipments valued over $1,000 and certain legally-defined commodities valued over $250. We estimate formal and informal entry shipments valued under $1,001 except for the legally-required commodities estimated under $251. The basic monthly and cumulative year-to-date statistics summarize merchandise imports in terms of the commodity classifications of the Tariff Schedules of the United States Annotated (TSUSA), by country of origin, and by Customs district of entry. Additional reports show and interrelate aggregate data covering major commodities and groupings in terms of the Standard International Trade Classificiation (SITC), Standard Industrial Classification (SIC), end-use codes, and coverage by geographic or political areas. We compile time series for groups of commodities and countries on a seasonally adjusted and unadjusted basis. We compile data on the movement of imports by vessel and air separately to provide trade information in terms of value and shipping weight. These data show United States port of unloading, foreign port of loading, commodity, country of origin, type of vessel service, and flag of vessel. We compile the import statistics on monthly and annual bases in terms of both the Customs valuation and the c.i.f. valuation (valuation including the cost of merchandise, based on Customs value, and insurance and freight) with separate data on aggregate freight and insurance incurred in transporting the merchandise to the United States.

The import statistics include government as well as nongovernment imports of merchandise into the United States, the Commonwealth of Puerto Rico, and the Virgin Islands, including Foreign Trade Zones. The data include imports of merchandise for immediate consumption, withdrawal from Customs-bonded warehouses for consumption, and entries into Customs-bonded warehouses.

The program provides statistical reports that are required by the Committee for Implementation of Textile Agreements for monitoring textile imports from all countries that have bilateral textile agreements with the United States.

A wide range of Government agencies use the program outputs to develop the import component of the merchandise trade figures for the balance of payments accounts; to evaluate the impact of imports on the United States economy and specific industries; to negotiate and measure the impact of tariff and trade concessions under the General Agreement on Tariffs and Trade (GATT); and to implement and monitor various international agreements such as the United States-Canadian automotive agreement and agreements on quotas for items such as textiles, steel, meat, footwear and television sets. Data users in industry, finance, research institutions and other fields use the data to appraise the economic effect of imports and prepare related share-of-the-market analyses. Both government and nongovernment users in the transportation field need the data to measure the volume and the effect of vessel and air shipments on their operations and their competitive status, and to plan promotional activities and the need for additional or new types of facilities.

The Trade Agreements Act of 1979 requires several changes in the import statistics program. These changes involve the advanc release of detailed monthly and cumulative import statistics and balance of trade figures on a c.i.f. import valuation basis, changes affecting certain outputs for imports under the Generalized System of Preferences (GSP), special provisions for handling imports from developing countries, and the integration of several thousand staged-duty rate changes into the import statistical system.

The Commerce Department and other agencies use the statistical outputs to administer the provisions of the Caribbean Basin Economic Recovery Act, generally referred to as the Caribbean Basin Initiative (CBI).

Export statistics--We compile monthly statistics from copies of official statistical documents collected by the U.S Customs Service. We compile information on a 100 percent basis for shipments individually valued at over $1,000 for all countries. We estimate value data for shipments valued under $1,001 for individual countries using factors based on the ratios of low-valued shipments to individual country totals. The basic monthly and cumulative year-to-date statistics summarize merchandise exports in terms of the commodity classifications of Schedule B, by country of destination, and by U.S. Customs district of exportation. Additional reports show and interrelate aggregates covering major commodities and groupings in terms of the SITC, SIC, and end-use codes, and coverage by geograpic or political areas. We compile time series for groups of commodities and countries on a seasonally-adjusted and unadjusted basis.

The program produces a series of monthly and annual summary reports, reference tabulations and publications covering United States exports of domestic and foreign merchandise. The reports show quantity (where applicable), value, and shipping weight (where applicable) of exports in detailed commodity classifications. Information includes various reports on commodity, country of destination, and U.S. Customs district. Other reports present data in terms of broad groupings of commodities, countries, and U.S. Customs districts. Data items include movement of exports by vessel and air with information on value and shipping weight, United States port of loading, foreign port of unloading, commodity, country of destination, type of vessel service, and flag of vessel.

The export statistics include nongovernmental shipments to foreign countries, including shipments from Foreign Trade Zones, as well as Government shipments (e.g., Department of Defense Military Assistance Program, Grant-Aid shipments, economic assistance shipments, and shipments of agricultural commodities under P.L. 83-480). Individual Schedule B commodity totals show a list of commodities known as Special Category (having military implications) with no cross-classification in terms of country, but Special Category commodity totals are aggregated in terms of individual countries.

The Government uses the outputs of this program to develop the export component of merchandise trade figures for the balance of payments accounts; to appraise and analyze major movements and trends in United States exports; to plan and evaluate programs such as the export promotion program, agricultural development and assistance programs (P.L. 83-480), and programs under the Foreign Assistance Act (AID); to conduct trade negotiations under the GATT; and to provide a statistical base for implementing the strategic commodities controls and short supply aspects of the Export Administration Act. Nongovernment users employ the data extensively in share-of-the-market analyses and market penetration studies and in determining marketin policies and strategies. Both government and nongovernment users in the transportation field use the data on vessel and air shipments extensively.

Trade monitoring--This program covers our responsibilities under the Trade Act of 1974. Applicable parts include section 608 (Uniform Statistical Data on Imports, Exports, and Production), Title V (Generalized System of Preferences), and section 282 (Trade Monitoring System). Section 608 provides for the presentation of statistical data on imports, exports, and domestic production on a comparable basis. The purpose is to increase the usefulness of statistical outputs for analysis of trade implications, including the impact of trade on domestic industry. We restructure and maintain the commodity classification systems on a regular basis. The initial modifications of the import, production, and export classification systems serve as a basis for further refinements and changes. We will modify each of the systems regularly to reflect changing statistical needs and improve the comparability of United States trade and domestic production data. The modifications also will improve the comparison of trade data from the United States and other countries on the basis of the SITC. The development of a more reliable domestic system will aid the identification and establishment of the United States position in international economic affairs.

Title V requires the compilation of data for monitoring imports from designated beneficiary countries and the evaluation of the economic effects of the Generalized System of Preferences (GSP). The GSP provides products from developing countries with fair and responsible duty-free access to the United States market. In accordance with Title V, the compilation and display of GSP import data in basic output tabulations provide the means for analyzing the effectiveness of the Act's objective, i.e., to promote exports and economic development in beneficiary countries and territories. The tabulations also provide data input necessary to make periodic recommendations to the President concerning changes in eligilibity whenever GSP imports from a beneficiary country trigger the need for competitive limitations. Monthly data on GSP imports and specially-generated, periodic import tabulations facilitate monitoring of the GSP program and allow the development of economic import studies.

Section 282 requires a program to monitor the relationship between changes in the volume of imports and changes in United States employment and production by geographic region. Estimates of domestic activity by geographic location assist the identification of areas affected by imported articles that are competitive with local products.

We meet Section 608 requirements by publishing Current Industrial Reports that are more comparable with the statistics on imports, exports, and domestic production. We also are making additional revisions to Schedule B and Tariff Schedules of the United States Annotated (TSUSA) that will further enhance the comparability of the classification systems.

We are working on the development and introduction of a completely restructured foreign trade commodity classification system that is compatible with the new international trade data system. The current classification systems are national ones. The TSUSA has over 10,000 codes for classifying commodities and products imported into the United States and the Schedule B has almost 5,000 codes for classifying commodities and products exported from the United States. We will recast the national trade data systems into an international one, based on the 6-digit structure of the Harmonized Commodity Description and Coding System (HS), developed by the Customs Cooperation Council (CCC).

The development of an international trade data system for use in classifying United States imports and exports is a national mandate. Legislation included in the Trade Act of 1974 directed the United States to actively participate in the work of the CCC in its efforts to develop an international classification system. The President reinforced this mandate when he requested the U.S. International Trade Commission to investigate and report on the effect of U.S. adoption of the Harmonized System. The international timetable calls for implementation in January 1987. We are working on a timely conversion of the existing import and export statistical systems.

Increase for 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm Pos.	Amount	Perm. Pos.	Amount
Trade monitoring......................	47 (46)	$1,448	58 (59)	$2,048	+11 (+13)	+$600

In 1987, the United States will revise the import, export, and domestic output classification systems to promote comparability with the new international Harmonized System. This revision provides a unique opportunity to improve the correlation between trade and production statistics, and it will permit our economic statistics to address the growing list of trade-related issues. This proposal provides for the continued revision, improvement, and maintenance of the significantly expanded and more volatile import, export, and output classification systems.

Although base funding provides for the development and initial implementation of these revised classification systems, additional funding will provide for continued improvement, maintenance, and extension of the expanded system. First, the revised output and import classification systems will increase by more than 20 percent from the existing level of 11,000 output codes and 11,000 import codes. The revised export classification system will increase from 5,000 export codes to 8,000 revised codes. Several trade impacted areas such as textiles and footwear will have an increased number of codes, improved comparability, and a basically restructured output classification system that will result in additional data collection and processing expenses. Finally, we will have to revise the export system several times a year to keep it comparable with the import system. The import codes can be changed anytime during the year. Comparability considerations will require that we make corresponding changes in the export codes throughout the year. Under the old system, we only changed the export codes once a year. Similarly, more frequent changes to the trade classification systems will demand greater and more frequent changes to the output classification system.

The new system will require more processing and personnel resources to produce meaningful trade comparisons of high quality. Additional resources will fund a broad-based educational campaign aimed at exporters, importers, and producers. The campaign will inform them about the new system prior to full implementation and keep them aware of future changes. Although these outreach campaigns should reduce reporting problems, the new system will result in additional processing costs associated with collecting, editing, analyzing, and tabulating the expanded and revised data base. We will completely revamp the import and export computer programs to accommodate the creation of over 20,000 records (one for each import and export code) needed to process the trade data; we will have to revise procedures and programs to handle the inevitable increase in defective documents (and corresponding costs) which can be expected for the 12 month period following the January 1987 implementation date; and we will have to create a new set of table and publication programs. All of these projects will require substantial programming, computer and other staff resources. Publication costs also will increase substantially since publications will be larger and we will have to print code descriptions more frequently.

Without additional funding, we will not be able to improve and maintain the expanded classification systems. Specifically, we will not be able to extend changes to the trade classification systems, the output classification system, and all current production surveys in time to maintain data comparability. Over time, the SIC-based output classification systems and the HS-based trade classification system would diverge and much of the improved comparability would be lost.

The position and object class detail for this increase follows:

	Grade	Number	Amount
Statistician	GS-12	3	$94,857
Computer personnel	GS-12	2	63,238
Statistician	GS-09	2	43,608
Statistician	GS-07	4	89,120
Total salaries		11	290,823
Less lapse		-3	-72,706
Permanent positions		8	218,117
Positions other than permanent		5	106,000
Other personal compensation		...	9,883
Total compensation		13	334,000
Personnel benefits			37,000
Travel and transportation of persons			63,000
GSA space rental			51,000
Communication, utilities and miscellaneous charges			30,000
Printing and reproduction			16,000
Other services			39,000
Supplies and materials			18,000
Equipment			12,000
Total			600,000

Activity: Current economic statistics programs
Subactivity: Government statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Government finance survey	40 (40)	$1,452	40 (40)	$1,436	40 (40)	$1,465	40 (40)	$1,465	... (...)	...
Survey of government employment	14 (14)	517	14 (14)	513	14 (14)	528	14 (14)	528	... (...)	...
Tax and intergovernmental revenue	74 (74)	1,546	74 (74)	1,524	74 (74)	1,548	74 (74)	1,548	... (...)	...
Formula grant data	9 (9)	797	9 (9)	796	9 (9)	808	9 (9)	808	... (...)	...
Federal reporting systems	13 (17)	554	13 (17)	553	13 (17)	561	13 (17)	561	... (...)	...
Total requirements	150 (154)	4,866 (4,924)	150 (154)	4,822 (4,821)	150 (154)	4,910	150 (154)	4,910	... (...)	...

Goals and Objectives

The goals of this subactivity are to provide current statistical information on state and local governments in the areas of public finance and employment; to collect tax and intergovernmental revenue data on state and local governments, to provide fiscal data elements and boundaries and to provide Federal expenditure data on a geographic basis.

The objectives of this subactivity are to maintain and improve the accuracy of data produced and to ensure that data needs in the areas of governmental finance and employment are identified and met.

Base Program

Government finance survey--This survey provides annual estimates of government financial activity, quarterly statistics on Federal, state, and local government tax revenues, and quarterly statistics on the finances of selected public employee retirement systems. Annual financial statistics serve as updates of census year benchmark statistics, and include data on revenue by sources, expenditures by function and object, indebtedness and debt transactions and financial assets.

Many benchmarks and analyses are incorporated in these state and local government financial statistics. The Bureau of Economic Analysis estimates the public sector component of the annual GNP accounts from this information. State and local governments account for approximately 13 percent of total GNP annually. The tax and intergovernmental revenue data base is required for analysis of fiscal policy, tax burdens and comparative studies on governmental finance. The detail by type of local government provides information on the relative activity of counties, municipalities, townships, special districts, and school districts. Public officials (administrative, legislative and judicial), public interest groups, the academic community (particularly schools of public administration), the financial community, and the business community rely heavily on these estimates for economic research and their appraisals of government policies. Further, the Advisory Commission on Intergovernmental Relations--the organization responsible for the development of recommendations regarding the financing of state and local governments and their relationship with the Federal government--makes wide use of these statistics in their studies.

We publish aggregated financial data on a fiscal year basis in the form of nationwide totals by level and type of government (including the Federal government) and related state-by-state, state governments and types of local governments (counties, municipalities, townships, special districts and school districts). The publications provide individual government statistics for states, counties of 100,000 population or more, municipalities of 50,000 population or more and school systems with enrollments of 15,000 or more. Local government aggregates cover approximately 410 county areas with population of 100,000 or more.

We obtain annual survey data in various formats, and base the survey on a sample of 20,000 local government units (out of a universe of 82,000 governments). State and local government data systems have reached a point where they can often provide data for the universe. A number of state government agencies collect local government data, and they can supply information for this program without placing a reporting burden on local government officials. Educational data benefit from these special arrangements, since the survey obtains data from central sources in 49 states. Mail survey questionnaires still provide a major portion of the data when information is not available on computer tapes or other central reports. Information compiled from audit reports, budgets and other public documents submitted in lieu of mail questionnaires also are an important source of data as are the field compilations of the largest governments.

The quarterly tax survey provides national totals by type of tax and level of government (Federal, state, and local), state-by-state figures of major types of state taxes and local property tax collections for populous local areas. The survey uses a mail canvass of the 50 state governments and major local government tax collections. The general revenue sharing program uses a byproduct of the tax and intergovernmental revenue data--individual income tax collections by state--to determine interstate allocations of funds. We supply these data to the Treasury Department each February for the calendar year income tax collections. The Bureau of Economic Analysis uses these data to update the annual government sector estimates of the GNP.

The quarterly survey of public employee retirement system finances meets the needs of the Federal government in developing estimates of public sector activity in the GNP estimates, and financial and security market analysts use these data as a general measure of activity and asset holdings. The survey uses a mail canvass of approximately 100 of the largest public employee retirement systems and accounts for approximately 85 percent of all assets held by such organizations.

Survey of government employment--This program provides for the annual update of government employment and payroll data by type of government and function. These data provide the basic measures of public sector employment and payrolls for intercensal years. Estimates include full-time and part-time employees, full-time equivalent employment, October payrolls and average full-time employee earnings for local governments in the approximately 410 county areas with 100,000 or more population. Employment and payroll statistics cover individual municipal governments with 50,000 or more population and individual county governments with 100,000 or more population. We provide state-by-state estimates for each type of government (Federal, state, county, municipal, township, school district and special district) and each level of government (Federal, state and local) by governmental functions (e.g., education, police protection and fire protection). These data appear in four publications: County Government Employment, City Government Employment, Public Employment, and Local Government Employment in Selected County Areas. The survey is the only intercensal source of public employment and payroll data at this level of detail.

These data meet the following needs: the Bureau of Labor Statistics makes annual benchmark adjustments in their monthly statistical series on employment and earnings; the Department of Housing and Urban Development develops a public wage inflation factor for the allocation of their operational subsidy grants to local housing authorities; the Bureau of Economic Analysis develops GNP statistics, the GNP deflator indexes and regional economic analyses; the U.S. Department of Agriculture allocates administrative funds to states participating in the Special Supplemental Food Program for Women, Infants and Children; and Federal, state and local government legislators and administrators frequently need comparable data on a state area, substate area and/or individual government basis for decisionmaking and administrative purposes.

Tax and intergovernmental revenue--This program provides detailed statistics on tax revenue, by type, and intergovernmental revenues, by function and source for state and local general purpose governments. We collect tax data by the major categories of property, sales, licenses and permits, and we identify intergovernmental receipts according to source of funds--Federal government, state government, other local governments--and by major purpose served. The specific purpose categories include education, public welfare, health and hospitals, streets and highways, housing and urban renewal, property tax relief programs and general support.

This program, which provides an annual update for all 39,000 counties, cities, and towns, is the only comprehensive source of information on these fundamental revenue types. These revenues are a basic ingredient of the Bureau of Economic Analysis' national income and product accounts. Fiscal policy analysts at the Office of Management and Budget, Treasury, and the Congressional Budget Office use the data to develop and implement proposals for constructing an intergovernmental system which matches responsibilities, needs and resources in the most efficient and effective manner. The data form an authoritative core used extensively by the Advisory Commission on Intergovernmental Relations in making policy recommendations affecting the financing of public services. Staff of congressional committees rely heavily on these data to develop, propose and analyze legislation involving the financing of public services. For example, these data are used to analyze the pending tax reform proposals for eliminating the deduction of local taxes on Federal returns. These data also are used in numerous proposals to target Federal grants through formulas which more precisely measure need, tax capacity, tax burden, and tax effort. These efforts are commonly called "Representative Tax Systems."

In addition to these nationally-recognized uses, these data provide state and local government legislatures and executive commissions with the level of detail required to assess and compare their revenue structure (sources, yields, burdens) against other states and locales. Similarly, the Tax Foundation and myriad citizen interest groups rely on these data to monitor and analyze the efficiency of the public sector. Corporate researchers use the data to determine relative tax burdens when considering site locations.

We obtain the data primarily through cooperative collection arrangements with state agencies that have the responsibility for overseeing, monitoring, or reporting on, the financial operations of local governments in their state. We have agreements in 36 states where they conduct the initial survey and transmit the results to the Census Bureau. In the remaining states, or in cases where there are statistical gaps, we conduct a direct mail canvass. As a result of these efforts, the states depend upon Bureau technical and professional support.

Formulation grant data--This program supports special efforts by the Census Bureau to provide Federal and state agencies with data necessary to administer various grant programs. Major products include the identification and classification of governmental entities, the measurement of local government revenues, the development of specialized computer programs, the preparation of detailed computer data tapes, and verification of data.

Federal reporting systems--This program provides for two reports on Federal expenditures.

The Federal Assistance Award Data System (FAADS) serves as the Nation's central source of information on all domestic financial assistance programs of the Federal Government. Information for each award includes the assistance program and amount funded, the Federal agency responsible for the program, the type and name of recipient, and geographic location of the recipient (including the congressional district). We collect the data quarterly in a standard, machine-readable format directly from Federal agencies administering the programs. Principal data users include Members of Congress, the Office of Management and Budget and state governments.

The Consolidated Federal Funds Report (CFFR) provides statistics on Federal Government expenditures or obligations in each state and territory, county and municipality. Coverage of the CFFR includes Federal salaries and wages, procurement, grants and direct payments for individuals, as well as Federal insurance and loan programs. We issue a series of three annual publications, each covering different levels of geographic detail (state, county and subcounty). The CFFR is required by the Consolidated Federal Funds Report Act of 1982 (P.L. 97-326).

Data users include Members of Congress, congressional committees, the Office of Management and Budget, state and local government officials, public interest groups and other researchers. The CFFR is the only central source of information on the geographic distribution of virtually all Federal Government spending.

Activity: Current economic statistics programs
Subactivity: Agriculture statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+)	Dec.(-)
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Agriculture statistics..........	10	$388	10	$391	10	$398	10	$398	...	...
	(10)	(389)	(10)	(391)	(10)		(10)		(...)	

Goals and Objectives

The goals of this subactivity are to provide current statistics on cotton production and ginning by state and county and to provide current information requirements for general census data on agriculture.

The objectives of this subactivity are to maintain and improve the quality of the data published and to ensure that these data are responsive to to the needs of users.

Base Program

This program provides the key measures of the cotton ginning industry on an annual basis as required by Title 13, U.S.C. 41-45. This title governs all data collected and published, including dates. We collect and publish information on cotton ginning and production from all cotton gins (about 2,400) and cotton producing states 13 times during the ginning season. Seven monthly reports and one annual report show figures for counties and states. Data users include the U.S. Department of Agriculture for its crop marketing and estimating programs and the textile, apparel, and cotton industries.

Activity: Current demographic statistics programs
Subactivity: Demographic surveys

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Current population survey........	106 (233)	$5,563	106 ([illegible]33)	$5,591	106 (233)	$5,709	106 (233)	$5,709	... (...)	...
Methods development survey.......	11 (11)	717	11 (11)	708	11 (11)	724	11 (11)	724	... (...)	...
Survey of income and program participation..................	195 (466)	15,415	241 (680)	19,669	241 (680)	19,946	241 (680)	19,946	... (...)	...
Total requirements...............	312 (710)	21,695 (21,303)	358 (924)	2[illegible]68 (2[illegible],962)	358 (924)	26,379	358 (924)	26,379	... (...)	...

Goals and Objectives

The goals of this subactivity are to provide current information on the number, geographic distribution and social and economic characteristics of the population and to test and implement new approaches and concepts for demographic surveys.
The objectives of this subactivity are to maintain and improve the quality and reliability of socioeconomic data; to maintain current programs that meet the needs of existing Federal programs, particularly state-level data; and to ensure the continued orientation of the program toward national goals.

Base Program

Current population survey--The Bureau of Labor Statistics (BLS) finances the major element of this survey--the development of the official government estimates of employment, unemployment and related data on characteristics of the labor force and persons not currently in the labor force. We obtain monthly estimates that meet the BLS standards of reliability for the Nation as a whole, the 11 largest states, New York City and the Los Angeles MSA. Annual estimates cover the 39 remaining states, the District of Columbia, 30 large MSAs and 11 of their central cities. These data are among the most important of the indicators that measure the status and progression of the national economy on a current basis. Consequently, they are key inputs to the decisionmaking processes involving national economic policy and the evaluation that form the basis for the discontinuance, modification, or creation of national economic programs. Subnational data from the Current Population Survey (CPS) are the basis for the distribution of billions of dollars allocated each year to local areas based on their unemployment levels and rates.

In addition to the estimates related to the labor force, the CPS--along with the Survey of Income and Program Participation (SIPP)--provides a major intercensal source of up-to-date information on general socioeconomic characteristics of the population such as the distribution of personal and family income, school enrollment, educational attainment, migration, future birth expectations, and changes in the number of families and their composition. We tabulate these characteristics by age, race, sex, Spanish origin, veteran status, and other demographic variables. We obtain the data by adding special questions to the survey at various times throughout the year or by retabulating existing data for various subgroups of the population. The Bureau of the Census finances the supplemental portion of the survey and carries managerial responsibility for the technical operation of the entire survey, including quality control maintenance. The survey also serves as the vehicle for collecting a wide range of supplemental data requested and paid for by other Federal agencies. Social scientists and economists, as well as policymakers, use both basic and supplemental data to monitor and understand the growth and changes taking place in the Nation and to formulate policies and programs.

In April 1984, we began phasing in sample households selected from the new 1980 census sampling frame. We completed the phase-in of the new sample in July 1985; the sample size is about the same as before. The sample is state-based, however, and will improve reliability of the state estimates. Reliability of the national estimates remains unchanged. In January 1985, we improved the estimation procedure to refine the noninterview adjustment procedures and the means for ratio estimating the sample population to independent population estimates. As a result of these revisions, the estimates of the Hispanic population from the CPS are now consistent with the levels measured in the 1980 Census. We also introduced geographic definitions (e.g., MSAs) based on the 1980 census in 1985.

During 1985, we began the complete reprogramming of the processing system used to produce the monthly CPS employment and unemployment estimates. This system was developed in the mid 1960's and is extremely inefficient relative to today's technology. The reprogramming effort, which will continue in 1987 will not only increase the efficiency of the system, but will substantially increase its flexibility to handle changing data requirements over time.

Methods development survey--This program provides a means to test and develop alternative survey methodologies and concepts needed to improve the quality and reliability of demographic surveys. Improvements derived from this program are applicable to CPS, SIPP and other demographic surveys of national importance, including those providing statistical measures of crime, housing, health, consumer income and expenditures. This program provides improvements that affect other programs budgeted in the tens of millions of dollars each year and provide the essential statistics for the allocation of billions of dollars of annual Federal program funds to state and local areas.

This program investigates all facets of survey operations covering areas such as interviewing methods, response bias, quality control procedures and questionnaire design. The kinds of methodologies tested in the first phase of this program included telephone versus personal interviews, response differences between household members and interviewer conditioning. We completed the testing of these different data collection procedures and issued reports on the effect of these procedures. The first several phases of testing focused on the content recommendations made by the National Commission on Employment and Unemployment Statistics (NCEUS) for the Current Population Survey (CPS). We have already incorporated a few of the changes in the CPS and we plan to introduce others in the survey in 1987.

During 1985, we broadened the focus of the MDS to encompass various aspects of telephone interviewing in household surveys in general. The increasing participation of women in the labor force, smaller family sizes and other factors, are making it more difficult and costly to conduct household surveys by personal interview since many attempts are needed to contact an eligible respondent. Although we realize that the nature of our panel surveys will undoubtedly preclude the use of telephone interviews exclusively, we need further investigation of the effects of increased telephone usage, centralized telephoning and other methods.

In 1986 and 1987 we will continue the work started in 1985 on the use of centralized telephone interviewing and Computer-Assisted Telephone Interviewing (CATI) in panel surveys such as the CPS. We will center this work on the effects of follow-up interviews conducted by someone other than the original interviewer, our ability to interact centralized telephoning and personal interviewing in a time frame consistent with the schedule for the survey, and to carry out record check studies to validate information obtained using this methodology. We will then compare it with data collected by personal interview. The first phase is testing the operational feasibility of such procedures in conjunction with CPS. The ability to recycle cases from the centralized telephone facility to the regional offices for personal visits when required is a critical factor. This will be the key in determining the feasibility of future centralized telephone interviewing in the CPS. Upon the successful completion of this phase (scheduled for mid-1986), we will proceed with testing the quality of labor force data collected through centralized CATI procedures. We will then compare it with data collected under current interviewing procedures for the same geographic areas. This testing will continue through 1987. We must conduct these studies before we can seriously consider using such procedures in full-scale surveys that produce time-critical and sensitive economic and demographic data. Research results from this program will apply to other demographic surveys, as well, and may prove to be a cost reduction.

Survey of income and program participation-- This survey is designed to satisfy the need for improved data on the economic situation of persons and families in the United States. Information is collected on various sources of money and nonmoney income, taxes and assets and liabilities to produce improved estimates of income distribution, poverty and wealth. Data will be used to study the efficiency of Federal and state transfer and service programs, to estimate future program costs and coverage and to assess the effects of welfare, tax and Social Security reform proposals and other proposed policy changes.

We collect detailed socioeconomic and demographic information from a large national sample of households. The survey will have a continuing series of national panels composed of 16,000 interviewed households in 1984 and slightly smaller panels thereafter. Each panel will have a duration of 2 1/2 years and panels will overlap so that annual estimates are based on about 30,000 households. We interview each household three times a year and we ask them to recall a four-month period. Interviews gather core data for all household members 15 years old and over. We collect information on sources of money and nonmoney income, eligibility for and participation in various government transfer programs, labor force status, household composition, assets and liabilities, disability, work-related expenses, marital history, work history, pension coverage and taxes. The survey will permit the study of intra-year changes in income and poverty status and their relationship to participation in government programs, changes in household composition and other factors. The survey will be flexible enough to cover additional topics of interest to Government policymakers.

The SIPP data are valuable to economic policymakers, Federal agencies that administer social welfare or transfer payment programs (the Department of Health and Human Services, the Department of Housing and Urban Development, and the Department of Agriculture), the Congress, state and local governments, and nongovernmental research organizations.

We started regular data collection activities in 1984 and issued the first quarterly report in September 1984. We expanded the sample with the introduction of the second panel in February 1985; the sample will reach its full complement in 1986. The 1986 budget provides for the completion of the survey development and full implementation of the sample panels.

Activities for 1987 will include interviewing a full component of 3 survey panels [of about 14,000 households]. Data from the interviews are keyed in our regional offices and sent to headquarters for computer editing and reformatting for analysis purposes. Because of the longitudinal nature of the survey, the data processing activities are more complex than those for other surveys so we can ensure the merging of data from a series of interviews.

Other activities will include interviewing of the 1985 and 1986 panels; continuing project management and planning; data analysis, preparation of data products, including published reports and public use microdata files; research on data quality improvement and coordination with other Federal agencies to ensure that the survey content is properly focused.

Activity: Current demographic statistics programs
Subactivity: Demographic reports

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Population characteristics.......	50 (50)	$1,808	50 (50)	$1,660	50 (50)	$1,693	50 (50)	$1,693	...	...
Population estimates and projections.....................	35 (39)	1,106	35 (39)	1,028	35 (39)	1,053	35 (39)	1,053	...	...
Demographic analysis.............	9 (10)	357	9 (10)	326	9 (10)	328	9 (10)	328	...	...
Total requirements...............	94 (99)	3,271 (3,252)	94 (99)	3,014 (3,013)	94 (99)	3,074	94 (99)	3,074	... (...)	...

Goals and Objectives

The goals of this subactivity are to provide current reports on the geographic distribution and the demographic, social, and economic characteristics of the population; to provide current estimates and projections of the population of the United States; and to provide for the development, analysis and publication of special analyses of demographic, social and economic trends.

The objectives of this subactivity are to publish recurring reports on the current estimates, demographic and socioeconomic characteristics, projections of the population and special analyses; to maintain programs that adequately meet Federal needs; to publish reports that will assist decisionmakers in developing national policy; and to maintain or improve the quality, reliability and relevance of the data produced.

Base Program

Population characteristics--Reports based on information from the Current Population Survey and other surveys provide data essential for planning and evaluating many public and private programs. These reports include special analyses and current statistics on a wide range of topical concerns. We present data on race, age, sex, Spanish origin, household, family and personal income (both money and nonmoney), employment and unemployment, occupation and industry, marital status, family and household living arrangements, educational attainment, characteristics of students and drop-outs, voting, migration and residence (farm and nonfarm, metropolitan and nonmetropolitan). We collect biennial data on fertility to date and lifetime fertility expected by women in childbearing years. These data are essential for making short- and long-term population projections.

The reports issued for these subject matter areas provide cross-classifications of characteristics for analytical purposes, and special analytical studies improve the quality of income data.

In addition to the recurring reports, we recently published special studies on American families, non-cash benefits, child support and alimony, trends in childspacing, characteristics of Americans during midlife, selected characteristics of travel to work in metropolitan areas, characteristics of American children and youth, characteristics of the older population, a profile of female householders, characteristics of American husbands and wives, the geographic mobility of Americans, money income and poverty status of families and persons by state and substate areas, household money income by divisions and states and lifetime earnings of men and women. Special studies include childcare for working parents and immigration to the United States.

We will continue work on statistical tables and analytical texts for publication in *Current Population Reports*. These reports describe the relevant demographic, economic, and social characteristics of the population, and we publish many of the reports on an annual basis. We collect and publish nationwide data on the projections of the number of persons of voting age, voter registration and participation for congressional election and presidential election years.

Rapidly changing trends in the subject areas covered by this program make the data very important to several Federal agencies including the Departments of Justice, Health and Human Services, Education, Transportation and the U.S. Civil

Rights Commission. These reports on the demographic and socioeconomic characteristics of the population provide data to determine the basic characteristics of the Nation's human resources, to measure change in the economic and social situation, and to understand the current situation of the Nation in relation to areas such as income, education, employment, language proficiency, childcare, racial and ethnic groups, the aged and other areas.

Population estimates and projections--Reports provide regular estimates of the population of the Nation by age, sex, and race; the population of states, counties and local areas; the number of households by state; the population of states by age; and estimates of population for metropolitan areas, Puerto Rico and the outlying areas.

We prepare projections of population and households for future years for the United States with totals by state. Reports show estimates of minority populations by states with estimates of age, race and sex by county. Data used in making the estimates and projections include census population detail, births, deaths, immigration, school enrollment, housing statistics, Social Security data, and Internal Revenue Service data.

We provide assistance to other Federal agencies, state and local governmental units and other users in the interpretation and use of these data. We are working with state agencies under the Federal-State Cooperative Program for Local Population Estimates in the preparation of substate estimates using standard procedures that ensure consistency with the state and national estimates.

Population estimates satisfy the data requirements specified in legislation. The Office of Management and Budget requires these data for the distribution of Federal program funds to local areas on the basis of population.

Demographic analysis--This program provides for the development of special microdata computer files and authoritative analyses of demographic, social and economic conditions and trends to foster effective program-relevant uses of Census Bureau data. We draw the special-purpose microdata files from continuing household surveys (the Survey of Income and Program Participation, the Current Population Survey, the Annual Housing Survey, and the National Crime Survey) and from the Censuses of Population. To the extent possible and warranted, we make the resulting microdata files and computer programs available for incorporation in the continuing programs of Federal statistical and program agencies and the public.

During 1987, we will prepare and distribute special files and/or analyses on noncash income from program participation (SIPP), migration (CPS), children's school progress and prison inmates as well as, respond to emerging issues. We will publish the special analyses based on these microdata files in official Federal reports and distributed in other forms to further inform policy processes. Users of report and the data files include Cabinet-level departments, Congressional Committees, state and local officials, businesspersons, educators, the media, researchers, librarians and the public.

Activity: Current demographic statistics programs
Subactivity: International statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Foreign research and analysis....	25 (26)	$1,078	18 (20)	$613	18 (20)	$630	18 (20)	$630	...	...
International data base..........	5 (6)	100	...	...	...	...	...	...	...	...
Total requirements...............	30 (32)	1,178 (1,176)	18 (20)	613 (613)	18 (20)	630	18 (20)	630	...	...

Goals and Objectives

The goals of this subactivity are to provide reliable estimates of population, labor force, and economic activity, their spatial distribution, analyses of aspects of demographic and economic policies and trends for various countries, and foreign technical assistance.

The objectives of this subactivity are to maintain up-to-date estimates and projections, to prepare monographs presenting results of research, to meet requests for information and assistance relating to these subject areas, and to provide technical assistance to overseas statistical programs as necessary. This program also provides for library facilities and the conduct of study tours for senior foreign dignitaries who produce and use these data.

Base Program

Foreign research and analysis--The outputs of this program include economic information and demographic estimates and projections of the population by age, sex, components of change, vital rates, gross reproduction rates and expectation of life at birth for Communist countries and other countries of national interest to the United States. The major emphasis is on Communist countries and special projects. Data on the selected countries cover characteristics of the population, population distribution, population policies and programs, economic statistics, input-output models, workforce characteristics, employment, remuneration, and statistical systems. This activity contributes a working data source of statistical information to assess the capabilities and probable actions of foreign countries. We meet special requests on the basis of Census Bureau source materials and expertise. These requests cover information and advice relating to problems, potentialities and prospects in population, labor force, economic development and related policies of certain foreign countries, particularly the USSR and the People's Republic of China.

Activity: Current demographic statistics programs
Subactivity: Housing statistics

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Housing statistics...............	9	$541	9	$539	9	$545	9	$545	...	...
	(9)	(538)	(9)	(539)	(9)		(9)		(...)	

Goals and Objectives

The goal of this subactivity is to provide a measure of the type and level of residential housing vacancies in the United States, both "inside and outside" MSAs by central cities and suburbs, and for the four major geographic regions.

The objectives of this subactivity are to produce the quarterly rental vacancy rate that is used in the formulation of the national quarterly economic indicators; to provide a quarterly measure of the types of housing in short supply, types of housing in which surpluses exist, and characteristics of housing available to the public; and to ensure that the collection and publication of data continue to be focused on the demand for housing and type of housing available to the American public.

Base Program

This program provides for a Housing Vacancy Survey that produces basic information on the current housing market. We produce vacancy rates for rental and homeowner units on a quarterly and annual basis for the Nation as a whole, four major geographic regions, and "inside-outside" metropolitan areas by central cities and suburbs. The annual report also contains vacancy rates for selected MSAs. The quarterly reports include data on selected characteristics of the vacant units (number of rooms, plumbing facilities, year built, duration of vacancy, monthly rent asked and sale price). Quarterly vacancy rates cover units with selected housing characteristics (number of rooms, plumbing facilities, year built, value and rent) for the rental and homeowner inventories. We compile the vacancy information from supplemental CPS questions.

The outputs of this program provide agencies such as the Federal Reserve Board, the Department of Housing and Urban Development, the Bureau of Economic Analysis, state and local government agencies, and other users such as home builders, mortgage companies and real estate agencies with a measure of both the type of housing available and the level of demand for housing in the United States. The information helps to determine the types of housing construction needed and the types in which surpluses exist.

Activity: Other programs and publications
Subactivity: Statistical abstract and supplements

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Statistical abstract and supplements..........................	32 (34)	$1,457 (1,435)	32 (34)	$1,488 (1,488)	32 (34)	$1,579	32 (34)	$1,579	...	...

Goals and Objectives

The goals of this subactivity are to provide basic statistical reference volumes and guides to sources of statistics; to provide reports which emphasize ready accessability to large amounts of statistical information and its source with comprehensive subject matter coverage, compact formats and convenience in use; to provide reports which meet topical information needs at national, state and small area levels; and to provide reports which facilitate and encourage the widespread use of the best data for decisionmaking at all levels of society.

The objectives of this subactivity are to prepare and release the annual Statistical Abstract of the United States, the annual Bureau of the Census Catalog and the Monthly Product Announcement; to plan and develop other statistical reference sources such as the Pocket Data Book, USA, State and Metropolitan Area Data Book, County and City Data Book and Historical Statistics of the United States; and to prepare and release a variety of guides and directories to help data users access and use Census Bureau statistics.

Base Program

We have issued the Statistical Abstract of the United States annually since 1878 (except in 1926 and 1944). It provides a comprehensive summary of industrial, social, economic and political data and serves both as a statistical compendium and as a guide to other statistical publications and sources. It includes over 1,600 tables and charts drawn from the data of more than 200 government, private, and international agencies. The Statistical Abstract is the principal source for annual statistics describing the social and economic structure of the United States. Highlights of statistics from the Abstract are available to data users through computer-based on-line retrieval services. An extension of the Abstract program includes planning and development of selected periodic supplements, including the Pocket Data Book, USA, County and City Data Book, and State and Metropolitan Area Data Book. A recent survey defined the following users of the Statistical Abstract: congressional offices, administrators and planners at all levels of government, business people, market analysts, researchers and educators, students, writers and librarians.

The Bureau of the Census Catalog is a complete guide to all Bureau publications, special tabulations and computer-based files. It provides detail as to content, periodicity and price for each report and file. This publication is the Census Bureau's official record of reports and activities. The Catalog keeps the public informed about the vast flow of census reports and the availability of data by way of the Bureau's computer files in a controlled and dependable manner. We maintain portions of the Catalog on computer-based on-line retrieval systems for access by users. We supplement the annual Catalog by the Monthly Product Announcement which lists all publications, computer tapes, microfiche and other products released during the previous month. We prepare and issue the Daily List internally and to selected Department officials on every working day. It provides a daily inventory of every report, press release, data file, microfiche and map issued by the Bureau and it also lists all reports transmitted to the printer with estimated release dates.

Activity: Other programs and publications
Subactivity: General research

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
General research..................	18	$691	18	$686	18	$696	18	$696	...	...
	(18)	(678)	(18)	(686)	(18)		(18)			

Goals and Objectives

The goals of this subactivity are to develop new or improved methods and procedures for the conduct of the Census Bureau's statistical operations and related activities and, as feasible, to provide theoretical foundations for such methods and foster their efficient implementation and automation.

The objectives of this subactivity are to develop a general research capability in time series analysis, survey design and estimation, and special experimental and evaluation studies of Census Bureau programs.

Base Program

This program investigates problems where the solution is applicable to more than one program, or where a unified approach can be more effective than individual efforts by each program. The areas of study and application include sampling theory and design; time series analysis; and other aspects of the collection, processing, or analysis of data that bear on the cost and usefulness of the resulting information. This continuing research effort allows scientific and technological developments that result in improved statistics and a higher level of responsiveness to data users.

For 1987, work will include further development of methods and techniques for estimating population counts and characteristics for small areas. We also will investigate the combination of time series analysis with demographic and econometric analysis to improve selected programs. We will use time series models to improve the seasonal and other adjustments made to the many time series produced by the Census Bureau.

Activity: Other programs and publications
Subactivity: Data systems development

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amoun
Data systems development.........	15	$685	15	$674	15	$679	15	$679	...	...
	(15)	(670)	(15)	(674)	(15)		(15)		(...)	

Goals and Objectives

The goals of this activity are to provide for the adaptation of advanced data capture, data processing and information retrieval technology to satisfy the unique requirements of the Census Bureau, using media such as magnetic tapes, disks and microfilm, as required and appropriate.

The objectives of this activity are to sustain and improve the reliability and capacity of devices, including mechanical document processors, intermediate storage media, chemical processing, electronic data processing and data capture equipment to improve techniques used to convert raw, human-readable information into a form readable by computers; and to convert computer-readable information into the various human-readable forms and formats required by the Census Bureau's programs.

Base Program

This program provides for the design, development and adaptation capabilities needed to support the unique and varied requirements of the Census Bureau's programs. Without these capabilities, the entire range of our programs would be hampered in their ability to meet the stated objectives. We need adaptations of techniques for the preparation of data for input to computers and the retrieval of information from record files to reduce costs and increase productivity.
Some of the major activities for this program include:

--development of an automated microfilm system for processing of CPS documents;
--development of a variable size document feeder for use with automated microfilm cameras;
--development of the capability to produce computer-compatible, check-in transaction records linking microfilm frame numbers and individual document numbers;
--development of a prototype image scanning system to convert paper images to electronic images for the purpose of review, edit, collating and storing via magnetic disk or optical disk;
--development of an automated procedure for retrieval of microfilm frames;
--exploration and development of direct document scan technology for use with automated microfilm cameras; and
--development of a local area network to interconnect personal computers and to share peripherals such as printers disk storage and word processors.

In 1987, we will continue to test alternative methods of capturing data from forms. This will include direct scan using state-of-the-art technology and the elimination of microfilm as an intermediate step for data input to computers. We will investigate prototype systems that provide for automatic character and bar-code scanning and structuring of data records on magnetic tape or other suitable media. We will emphasize the investigation of various document handling technologies to establish a Bureau-wide methodology for the transport of open forms and booklets.

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Object Class	1987 Base Perm. Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc.(+) or Dec.(-) Perm. Pos.	Inc.(+) or Dec.(-) Workyears	Inc.(+) or Dec.(-) Amount	Emp 12/31
11 Personnel compensation:										
11.1 Full-time permanent positions.....	2,279	2,225	$47,797	2,271	2,216	$47,386	-8	-9	-$411	2,242
11.3 Positions other than full-time permanent..........................	2,204	747	13,155	2,204	750	13,183	...	+3	+28	2,064
11.5 Other personnel compensation......	...	...	2,262	...	...	2,311	...	...	+49	...
Total..........................	4,483	2,972	63,214	4,475	2,966	62,880	-8	-6	-334	4,306
Other objects:										
12.1 Personnel benefits................			8,127			8,102			-25	
21.0 Travel and transportation of persons...........................			3,229			3,295			+66	
22.0 Transportation of things..........			104			104			...	
23.1 GSA space rental..................			5,990			5,934			-56	
23.3 Communications, utilities and miscellaneous charges.............			3,337			3,234			-103	
24.0 Printing and reproduction.........			2,652			2,642			-10	
25.0 Other services....................			3,747			3,775			+28	
26.0 Supplies and materials............			1,047			1,029			-18	
31.0 Equipment.........................			678			680			+2	
Total requirements...............			92,125			91,675			-450	

Justification by Object Class
(Dollar amounts in thousands)

	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp
Object Class	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	12/31
11.1 Full-time permanent positions										
General schedule	2,213	2,159	$46,254	2,205	2,150	$45,843	-8	-9	-$411	2,176
Wage board	53	53	673	53	53	673	...	...	...	53
Executive level	1	1	69	1	1	69	...	...	...	1
Senior executive service	12	12	801	12	12	801	...	...		12
Total, full-time permanent positions	2,279	2,225	47,797	2,271	2,216	47,386	-8	-9	-411	2,242
11.3 Positions other than full-time permanent										
General schedule	2,183	726	12,938	2,183	729	12,966	...	+3	+28	2,043
Wage board	21	21	217	21	21	217	...	...		21
Total, positions other than permanent	2,204	747	13,155	2,204	750	13,183	...	+3	+28	2,064
11.5 Other personnel compensation										
Overtime	...	...	2,082	...	...	2,131	...	...	+49	
Cash awards	...	...	65	...	...	65	...	...	...	
SES bonus pay	...	...	115	...	...	115	...	...	...	
Total, other personnel compensation	...	...	2,262	...	...	2,311	...	...	+49	
12.1 Personnel benefits										
Civil Service Retirement			4,251			4,227			-24	
Federal Insurance Contribution Act (FICA)			1,045			1,040			-5	
Health insurance			2,063			2,068			+5	
Life insurance			302			301			-1	
Employees' Compensation Fund			445			445			...	
Uniform allowance			21			21			...	
Total, personnel benefits			8,127			8,102			-25	

Object Class	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp
	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	12/31
21.0 Travel and transportation of persons										
Per diem..........................			$1,163			$1,214			+$51	
Air fare..........................			363			378			+15	
Other common carrier..............			20			20			...	
Privately-owned automobiles.......			1,649			1,649			...	
GSA vehicles......................			34			34			...	
Total, transportation of persons......................			3,229			3,295			+66	
22.0 Transportation of things										
Freight...........................			19			19			...	
Express...........................			5			5			...	
Rental of Government trucks.......			80			80			...	
Total, transportation of things.........................			104			104			...	
23.1 GSA space rental..................			5,990			5,934			-56	
23.3 Communications, utilities, and miscellaneous charges										
Federal Telecommunications System............................			777			777				
Other telephone, telegraph, and teletype services...........			381			357			-24	
Postal services by USPS...........			1,710			1,658			-52	
Rental of automatic data processing equipment............			270			254			-16	
Rental of office copying equipment.......................			71			66			-5	
Other equipment reantal..........			128			122			-6	
Total, communications, utilities, and other rent.....			3,337			3,234			-103	

Object Class	1987 Base Perm. Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc.(+) or Dec.(-) Perm. Pos.	Inc.(+) or Dec.(-) Workyears	Inc.(+) or Dec.(-) Amount	Emp 12/31
24.0 Printing and reproduction										
Publications....................			$1,367			$1,362			-$5	
Public use forms................			657			650			-7	
Envelopes......................			209			210			+1	
Other printing and reproduction..................			419			420			+1	
Total, printing and reproduction.................			2,652			2,642			-10	
25.0 Other services										
Training:										
University......................			62			62			...	
Office of Personnel Management......................			13			13			...	
Other...........................			78			78			...	
Maintenance of equipment.........			249			249			...	
GSA extra services...............			1,716			1,716			...	
Centralized Departmental Services.......................			841			841			...	
Other Federal Agencies:										
Social Security Administration..................			97			97			...	
Internal Revenue Service........			224			168			-56	
Bureau of Labor Statistics.....................			25			25			...	
F.W. Dodge.....................			53			53			...	
University contracts...........			44			44			...	
Other non-governmental contracts......................			345			429			+84	
Total, other services.........			3,747			3,775			+28	

	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp
Object Class	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	Perm. Pos.	Workyears	Amount	12/31
26.0 Supplies and materials										
ADP supplies......................			$217			$218			+$1	
Envelopes.........................			15			15			...	
Tabulating cards and paper.......			519			506			-13	
Miscellaneous administrative supplies..........................			111			109			-2	
Other specialized supplies and materials....................			131			128			-3	
Computer tape.....................			54			53			-1	
Total, supplies and materials..			1,047			1,029			-18	
31.0 Equipment										
Office machines and equipment...			397			398			+1	
Office furniture and fixtures...			201			201			...	
Other equipment..................			80			81			+1	
Total, equipment..............			678			680			+2	

Bureau of the Census
Salaries and Expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
Consulting services	...	...	...
Management and professional services	$200	$200	$200
Special studies and analyses	...	...	...
Management and support services for research and development	...	...	...
Advisory committee expenses	...	...	...
Subtotal	200	200	200
Amount withheld from obligation pursuant to P.L. 99-190	...	-20	...
Total	200	180	200

Management and professional services are used by various programs on a short-term basis to develop solutions for new problems and programs that require outside expertise. Examples include planning, documenting and implementing initial phases of the survey of the communications industry in the business program. The construction program includes development of current construction cost indexes for deflating the value of construction put in place. In the general research program, work will concentrate on telephone survey research on data analysis and dual frame estimation. The SIPP program will work on linkage of household survey data with establishment data from economic censuses and surveys.

Bureau of the Census

PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	FY 1984 Actual	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
Periodicals	$14	$387	$410	$435
Pamphlets	537	2,205	1,618	1,703
Audiovisuals	13	14	15	16
Total	564	2,606	2,043	2,154

Periodicals. Included in these figures are Data User News, Monthly Product Announcement, Bureau of the Census Catalog, and Statistical Abstract of the U.S. The minor increases reflect inflation in salaries, expenses, and printing costs.

Pamphlets. This category includes all statistical publications other than periodicals, comprising monthly, quarterly, and annual reports. These costs anticipate further cutbacks in these programs as a result of budget reductions, along with improvements in production efficiency; the small increase for FY 1987 reflects the production of the first preliminary for the 1987 Economic and Agriculture Censuses.

Audiovisuals. This category includes both in-house and contracted costs for producing artwork and photographic slides and transparencies for presentations. The small increases reflect inflation in salaries, expenses, and costs of photographic materials.

Appropriation Summary Statement

Appropriation: Periodic censuses and programs

This appropriation funds periodic censuses covering the major economic and demographic areas once or twice each decade. It also provides for geographic support activities required by the various censuses, the preparation of intercensal estimates of population and per capita income, and the maintenance and modernization of the Census Bureau's data processing facility.

The 1987 budget provides for the third year of funding for the 1987 Economic, Governments, and Agriculture Censuses. In the demographic area, the decennial census request provides for the fourth year of funding for the 1990 census and the intercensal demographic estimates request provides for the continued population and per capita income estimates for the distribution of Federal funds. The budget also provides for the final development phase of an automated geographic support system designed to increase the accuracy and efficiency of geographic operations, and for the continued modernization of the Census Bureau's data processing systems.

The programs and activities are as follows:

Economic censuses

These censuses supply statistics, as provided for in Title 13 U.S.C. 131, on the volume of production, trade, and characteristics of the Nations' industrial and business enterprises. Economic censuses covering manufactures; mineral industries; retail, wholesale, and service trades; transportation; and other businesses are taken every fifth year covering years ending in 2 and 7. Planning and preparatory work in FY 1987 will cover a variety of key operations, including forms design, questionnaire printing, preperations for mailing, and procurement of administrative records.

Census of governments

This census collects and compiles statistics from state and local governments on items such as taxes, tax valuations, governmental receipts, expenditures, indebtedness, and employees of states, counties, cities, and other governmental units. This census is taken as specified by Title 13 U.S.C. 161, every fifth year for years ending in 2 and 7. The 1987 estimate provides for the governmental organization survey and overall planning and research essential for the three remaining phases of the census.

Census of agriculture

This census collects and compiles statistics on the agricultural sector of the economy. The census, as specified by Title 13 U.S.C. 142, is conducted every five years covering years ending in 2 and 7. Activities for 1987 include continued planning for the mail list, final development of edit and tabulation systems and continued planning for the Census of Agriculture and the censuses of Puerto Rico, Virgin Islands, and Guam.

Intercensal demographic estimates

This program provides for the development and preparation of updated population and per capita income estimates as required by the Department of the Treasury for the equitable allocation of funds under the General Revenue Sharing Act (State and Local Assistance Act of 1972, P.L. 92-512 and P.L. 98-185). Activities in 1987 include the preparation of mid-1986 population estimates for states, counties, and sub-county areas for eligible general purpose governmental units.

Decennial census

The decennial census is required by Title 13 U.S.C. 141. It involves the enumeration of the total population of the 50 states the District of Columbia, Puerto Rico, Virgin Islands, Guam, and other areas of U.S. sovereignty or jurisdiction. The 1987 budget provides for the fourth year of funding for the 1990 census. We will shift the primary emphasis from testing to decision-making and actual preparatory work for the 1990 census. Specific activities will include evaluation of 1986 test censuses, conduct of the 1987 test census program and special purpose tests, submission of proposed questionnaire topics to Congress, and planning and preparation for the 1988 dress rehearsal.

Geographic support

This program provides geographic support to meet the requirements of the various periodic programs. The boundary and annexation program includes an annual survey of all counties of the United States and all places with 2,500 or more inhabitants for the purpose of recording and mapping changes resulting from annexations, incorporations or disincorporations or other changes in boundaries. The geographic base file system provides for the correction, update, maintenance, and extension of the files and related maps required to assign small area geographic classifications to census and survey data. The 1987 budget provides funding to continue the geographic support services, and to complete conversion of geographic files from several independent sources to a fully-integrated, automated geographic support system.

Data processing systems

The 1987 budget provides for continued improvements in data processing capabilities and support of existing equipment and facilities. Increases in 1987 will fund two activities that were previously budgeted for 1989. Long procurement lead times for decennial data capture equipment require an earlier funding commitment. The replacement of data entry equipment at the Jeffersonville, Indiana processing facility had to be accelerated because existing systems are technologically outdated and the overall maintenance support of these units is deficient.

Appropriation Language and Code Citations:

1. For expenses necessary to collect and publish statistics for periodic censuses and programs, provided for by law,

13 U.S.C. 4, 6, 12, 131, 141, 142, 161, 181, 191;
15 U.S.C. 1516; 42 U.S.C. 1973 aa-5.

13 U.S.C. 4 authorizes the Secretary to "perform the functions and duties imposed upon him by this title" or he may delegate any of them "to such officers and employees of the Department of Commerce as he may designate".

13 U.S.C. 6 provides that "The Secretary...may call upon any other...establishment of the Federal Government...for information pertinent to the work provided for in this title." This section also provides that "The Secretary may acquire, by purchase or otherwise, from States, counties, cities, or other units of government,..., or from private persons and agencies such copies of records, reports, and other material as may be required for the efficient and economical conduct of the censuses and surveys provided for in this title."

13 U.S.C. 12 provides that "The Secretary is authorized to have conducted mechanical and electronic development work as he determines is needed to further the functions and duties of carrying out the purposes of this title and may enter into such developmental contracts as he may determine to be in the best interest of the Government."

13 U.S.C. 131 provides that "The Secretary shall take, compile, and publish censuses of manufactures, of mineral industries, and of other businesses, including the distributive trades, service establishments, and transportation (exclusive of means of transportation for which statistics are required by law to be filed with, and are compiled and published by a designated regulatory body), in the year 1964, then in the year 1968, and every fifth year thereafter, and each such census shall relate to the year immediately preceding the taking thereof."

13 U.S.C. 141 provides that "The Secretary shall, in the year 1980 and every 10 years thereafter, take a decennial census of population as of the first day of April..., which date shall be known as the decennial census date, in such form and content as he may determine, including the use of sampling procedures and special surveys."

13 U.S.C. 142 provides that "The Secretary shall in 1979, in 1983, and every fifth year beginning after 1983, take a census of agriculture."

13 U.S.C. 161 provides that "The Secretary shall take, compile, and publish for the year 1957 and for every fifth year thereafter a census of governments."

13 U.S.C. 181 provides that "The Secretary...shall annually produce and publish for each State, county, and local unit of general purpose government which has a population of fifty thousand or more, current data on total population and population characteristics and, to the extent feasible, shall biennially produce and publish for other local units of general purpose government current data on total population."

13 U.S.C. 191 provides that "Each of the censuses authorized by this chapter shall include each State, the District of Columbia, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, and the Commonwealth of Puerto Rico, and as may be determined by the Secretary, such other possessions and areas over which the United States exercises jurisdiction, control, or sovereignty."

15 U.S.C. 1516 provides that "The Secretary of Commerce shall have control of the work of gathering and distributing statistical information naturally relating to the subjects confided to his department. He shall also have the authority to call upon other departments of the Govenment for statistical data and results obtained by them; and he may collate, arrange, and publish such statistical information so obtained in such manner as to him may seem wise."

42 U.S.C. 1973 aa-5 provides that "the Director of the Census...conduct a survey to compile registration and voting statistics: (i) in every State or political subdivision with respect to which the prohibitions of section 4 (a) of the Voting Rights Act of 1965 are in effect, for every statewide general election for Members of the United States House of Representatives after January 1, 1974; and (ii) in every State or political subdivision for any election designated by the United States Commission on Civil Rights."

2. $185,555,000, to remain available until expended:

No Specific Authority

This phrase provides for extended obligation authority which would be restricted to the current fiscal year by 31 U.S.C. 718.

Summary of Resource Requirements
(Dollar amounts in thousands)

Appropriation: Periodic censuses and programs

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			+1,705	$105,600
	Planned cyclical changes in periodic censuses			+1,124	+71,454
CEN-64	Adjustments to base and built-in changes:				
	Other increases	...	2,462		
	Other decreases	...	-6,636		
	Subtotal, adjustments to base and built-in changes			...	-4,174
	1987 Base			2,829	172,880

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-) over 1987 Base	
	Comparison by activity:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Economic statistics programs:										
CEN-65	Economic censuses	242	$6,846	250	$10,640	255	$12,179	264	$13,179	+9	+$1,000
		(307)	(15,882)	(337)	(11,166)	(332)	(12,179)	(357)	(13,179)	(+25)	(+1,000)
CEN-70	Census of governments	25	1,000	25	941	25	5,352	25	5,352	...	...
		(29)	(1,010)	(26)	(970)	(194)	(5,352)	(194)	(5,352)	(...)	(...)
CEN-73	Census of agriculture	140	4,440	145	6,322	337	14,156	332	11,556	-5	-2,600
		(180)	(6,921)	(212)	(7,839)	(356)	(14,156)	(331)	(11,556)	(-25)	(-2,600)
	Subtotal	407	12,286	420	17,903	617	31,687	621	30,087	+4	-1,600
		(516)	(23,813)	(575)	(19,975)	(882)	(31,687)	(882)	(30,087)	(...)	(-1,600)
	Demographic statistics programs:										
CEN-77	Intercensal demographic estimates	72	2,609	72	2,554	70	2,617	70	2,617	...	...
		(76)	(2,639)	(83)	(2,357)	(81)	(2,617)	(81)	(2,617)	(...)	(...)
CEN-79	Decennial census	660	35,013	686	51,245	1,703	78,899	1,703	78,899	...	...
		(885)	(35,087)	(1,835)	(51,631)	(2,330)	(78,936)	(2,330)	(78,936)	(...)	(...)
	Subtotal	732	37,622	758	53,799	1,773	81,516	1,773	81,516	...	...
		(961)	(37,726)	(1,918)	(53,988)	(2,411)	(81,553)	(2,411)	(81,553)	(...)	(...)

	Comparison by activity:	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-) over 1987 Base	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
CEN-83	Sample redesign............................	... (...)	... (...)	... (...)	... (...)	... (...)	... (...)	14 (15)	$650 (650)	+14 +(15)	+$650 (+650)
CEN-85	Geographic support.........................	509 (649)	19,127 (16,081)	527 (681)	$18,622 (21,726)	439 (570)	$16,115 (16,115)	439 (570)	16,115 (16,115)	... (...)	... (...)
CEN-87	Data processing systems....................	... (...)	11,965 (11,636)	... (...)	15,276 (20,174)	... (...)	43,562 (43,562)	... (...)	57,187 (57,187)	... (...)	+13,625 (+13,625)
	Total requirements....................	1,648 (2,126)	81,000 (89,256)	1,705 (3,174)	105,600 (115,863)	2,829 (3,863)	172,880 (172,917)	2,847 (3,878)	185,555 (185,592)	+18 (+15)	+12,675 (+12,675)

NOTE: Permanent position amounts in parentheses represent total full- time equivalency. Dollar amounts in parentheses represent obligations.

Periodic Censuses and Programs
Justification of Adjustments to Base and Built-in Changes
(Dollar amounts in thousands)

Other increases	Perm. Pos.	Amount
Restoration of 5% pay reduction..	...	$2,336

Consistent with the Administration's objective to reduce the deficit, the 1986 budget proposed a 5% reduction in Federal employee salaries. A portion of the proposed reduction was restored in 1986 by Congress. The balance of $2,336,000 is restored in the 1987 budget.

Working Capital Fund..	...	126

Other decreases	Perm. Pos.	Amount
Management Savings..	...	-$3,686
Productivity Reviews..	...	-2,950
	...	-$6,636

Management savings

These savings include a goal of reducing the cost of positions in grades 11-15 by $780,000. These savings may be achieved by improved overall position management or through other administrative cost reductions.

The administration has proposed a reduction in administrative costs. The 1987 budget has been reduced by $2,906,000 to reflect these savings.

Productivity reviews

Several productivity reviews will be conducted during 1987. Areas to be reviewed include: Data Transcription Services, Library Services, Warehouse and Stock Handling, Motor Pool Vehicle Maintenance, Mail Services, and Automatic Data Processing Services. This amount reflects the savings anticipated in 1987.

Justification of Program and Performance

Activity: Economic statistics programs
Subactivity: Economic censuses

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Census of business.................	85	$3,156	119	$6,159	126	$6,053	135	$7,053	+9	+$1,000
	(107)	(7,893)	(160)	(6,401)	(164)		(189)		(+25)	
Census of construction.............	29	684	41	1,249	25	1.206	25	1,206	...	...
	(37)	(1,670)	(55)	(1,302)	(33)		(33)		(...)	
Census of manufactures and mineral industries........................	90	2,736	60	2,570	61	2,886	61	2,886	...	...
	(115)	(5,523)	(81)	(2,780)	(79)		(79)		(...)	
Census of transportation...........	38	270	30	662	43	2,034	43	2,034	...	...
	(48)	(796)	(41)	(683)	(56)		(56)		(...)	
Total requirements.................	242	6,846	250	10,640	255	12,179	264	13,179	+9	+1,000
	(307)	(15,882)	(337)	(11,166)	(332)		(357)		(+25)	

Goals and Objectives

The goal of this subactivity is to provide comprehensive statistics on the level of economic activity and the characteristics of industrial and business establishments for the Nation, states, local and outlying areas.

The objectives of this subactivity are to initiate the planning and improvement of the methodologies used in the collection, processing and publication of the economic censuses; to plan data content; to continue and enhance programs designed to minimize respondent burden and provide respondent assistance; and to ensure the quality of data collected in the censuses.

Base Program

Title 13, U.S.C. 131 requires censuses of manufactures, mineral industries, retail and wholesale trade, service industries, transportation and other businesses every five years covering years ending in 2 and 7. The results of the censuses are summarized and presented for various classifications such as kind-of-business, geographic location (state, county, MSA, city, central business district), sales size, employment size, legal form of organization, degree of specialization and others.

The economic censuses are the primary source of facts about the structure and functioning of the economy and, therefore, provide information essential to both government and business. These censuses furnish an important part of the framework for composite measures such as the gross national product and input-output analyses. In forecasting and planning, it is especially useful to analyze the national product in terms of the elements that determine its size and composition. The economic censuses make this possible by providing weights and serve as benchmarks for indexes of industrial production, productivity and prices. The censuses also furnish benchmarks and sampling lists for many of the Bureau's current economic programs. Business enterprises, trade associations, banks, investors, research groups, educational institutions and unions use data from the censuses for purposes such as planning expansion programs, selecting locations for new establishments, forecasting sales trends, determining market potential and checking sales and advertising performance. The information is also a primary input for the revision of the Standard Industrial Classification (SIC) system.

The 1987 Economic Censuses will include a total of about 9 million establishments engaged in mining, manufacturing, construction, retail, wholesale, selected services and transportation operations. We will minimize respondent burden by sending questionnaires to only forty percent of the establishments. We will use administrative records to obtain information for the other sixty percent of establishments that represent the smaller businesses.

Fiscal year 1987 is the third year in the six year cycle of the 1987 Economic Censuses. This is the critical year in the planning process. We must perform the following key operations: completion of forms content, forms design, and the actual printing of about 500 different questionnaires; development of the mailing list which will include individual names and addresses for each establishment; completion of administrative records procurement requirements; development of computer programs; initiation of programs for the assignment of geographic coding to establishments, and the combination of processes required to label and mailout the questionnaires. This request also includes the second year of improvements for reconciling the relationship between the 11,000 Standard Industrial Classification output codes and the 6,000 International Harmonized System codes. The operations described here apply to each of the censuses listed below.

The 1987 Enterprise Statistics program regroups census data for establishments under common ownership or control in order to show various economic characteristics of the owning or controlling firm.

The 1987 Economic Censuses of Outlying Areas encompasses Puerto Rico, the Virgin Islands, Guam and the Northern Marianas. Information collected for these areas will cover retail trade, wholesale trade, selected service industries, construction industries, and manufactures (but not minerals and transportation). We will supplement the mail canvass by personal interview in Puerto Rico and the Virgin Islands; elsewhere enumerators will visit each establishment.

A brief discussion of each census follows:

Census of business--This census is a collective title which includes the censuses of retail trade, wholesale trade and service industries. The census of retail trade includes establishments engaged in selling merchandise to the general public for personal or household consumption and in rendering services incidental to the sale of those goods. The census of wholesale trade includes establishments primarily engaged in selling merchandise to retailers and repair shops; to industrial, commercial, institutional, professional, or agricultural users; or to other wholesalers. It also includes establishments acting as agents or brokers. The census of service industries includes selected establishments primarily engaged in providing a wide variety of services for individuals, business and government establishments, and other organizations.

Census of construction--This census enumerates establishments engaged as general contractors and operative builders, special trade contractors and land subdividers and developers. Construction includes new work, additions, alterations and maintenance and repair.

Census of manufactures and mineral industries--The census of manufactures covers establishments engaged in the mechanical or chemical transformation of materials or substances into new products. The census of mineral industries enumerates establishments primarily engaged in the extraction of minerals including solids such as coal and ores; liquids such as crude petroleum; and gases such as natural gas.

Census of transportation--This census consists of three independent surveys for 1987, namely the truck inventory and use survey, the commodity transportation survey, and the survey of motor carriers and public warehouses and travel agents. The Truck Inventory and Use Survey provides characteristics and operational uses of truck resources. It is based on a sample of private and commercial trucks from a universe of about 35 million registrations. The Commodity Transportations Survey covering calendar year 1988 will provide commodity shipments from manufacturers, mining industries, petroleum bulk stations and grain wholesalers. The survey of motor carriers, public warehouses and travel agents will provide information on the number of establishments, employees, payroll and legal form of organization.

The following programs are related to several of the individual economic censuses:

The 1987 Survey of Minority-Owned Business Enterprises will determine the extent of business ownership by specific minority groups in the United States (Blacks, persons of Spanish origin, Asian Americans, American Indians and other minorities).

The 1987 Women-Owned Businesses publication will include economic data about firms owned by women. We will publish information on the number of firms, employees, payroll and receipts.

Increase for 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Census of business......................	126 (164)	$6,053	135 (189)	$7,053	+9 (+25)	+$1,000

We are requesting an increase to expand the Census of Business to include hospitals and selected transportation services. The additional data will be used to develop general economic indicators. Generally, the data are available from existing company or establishment records and will impose significantly less reporting burden than the detailed financial data previously collected by regulatory agencies.

Regulatory agencies used to be the sole source of data for the transportation sector. Deregulation reduced the amount of data for this sector. Deregulation also is changing the way that services are provided to business and customers. Government agencies such as BEA and the Department of Health and Human Services will benefit from information on hospitals in carrying out their program responsibilities.

The service sector continues to be the fastest growing component in the Nation's economy. This sector comprises 70 percent of the GNP. Services to the general public from this vital sector span wholesale and retail trade, hospital care, transportation, communications, finance, insurance, real estate, and government activities.

The economic and governments censuses collect and report information from the wholesale and retail trade establishments and the various governmental organizations. We also collect data from some service establishments in the Service Annual Survey, but more than 25 percent of the GNP is not covered in any of our data collection programs. The economic censuses are the most efficient vehicle to collect those data. Policymakers and Government agencies need data on these segments to measure the output of the economy and to make policy decisions. Trade and professional associations make use of the data to represent their industries better. Private businesses use the data to plan their service activities better.

This request is an additional step in providing statistical coverage of the service sector. The 1987 census would be expanded to include: 22 of the 50 industries in the transportation sector. These 22 industries include 175,000 establishments with 2.0 million employees. In addition, hospitals with 3 industries with 5,500 establishments and 2.9 million employees will be included in the 1987 census.

The existing Census of Service Industries only provides basic economic data on selected transportation industries -- public warehousing and arrangement of passenger transportation. The expanded service census will provide comprehensive data on 44 percent of all establishments classified in transportation.

Over the past year, we have been identifying data needs, researching conceptual issues, and planning for the most effective way to produce these data.

The object class for the increase is as follows:

	Grade	Number	Amount
Statistician	GM-14	1	$44,430
Statistician	GM-13	1	37,599
Statistician	GG-12	4	126,476
Statistician	GG-09	1	21,804
Clerk-typist	GS-05	1	14,390
Clerk-typist	GS-04	1	12,862
Total salaries		9	257,561
Less lapse		-2	-64,390
Permanent positions		7	193,171
Positions other than permanent		18	467,829
Total personnel compensation		25	661,000
Personnel benefits			100,000
Travel and transportation of persons			14,000
GSA space rental			62,000
Communication, utilities and miscellaneous charges			47,000
Printing and reproduction			21,000
Other services			53,000
Supplies and materials			40,000
Equipment			2,000
Total			1,000,000

Activity: Economic statistics programs
Subactivity: Census of governments

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Planning, direction, and review....	10	$391	5	$209	3	$111	3	$111	...	...
	(12)	(391)	(5)	(209)	(4)		(4)		(...)	
Government finance.................	...	...	...	...	2	396	2	396	...	...
					(14)		(14)		(...)	
Public employment..................	...	...	...	...	1	294	1	294	...	...
		(10)			(11)		(11)		(...)	
Governmental organization..........	5	124	7	250	1	338	1	338	...	...
	(5)	(124)	(7)	(250)	(12)		(12)		(...)	...
Taxable property values............	10	485	13	482	18	4,213	18	4,213	...	...
	(12)	(485)	(14)	(511)	(153)		(153)		(...)	
Total requirements.................	25	1,000	25	941	25	5,352	25	5,352	...	...
	(29)	(1,010)	(26)	(970)	(194)		(194)		(...)	

Goals and Objectives

The goal of this subactivity is to provide benchmark figures in the areas of public finance and public employment; local government organization, powers and activities; state-local fiscal relationships; property tax administration and related subjects.

The objectives of this subactivity are to identify the most pressing needs for data in these areas and to develop procedures and arrangements that will gather and present the data in the most efficient and useful way.

Base Program

Title 13, section 161 of the United States Code requires the census of governments on a quinquennial basis. Title 13 requires "each such census shall include, but not be limited to, data on taxes and tax valuations, governmental receipts, expenditures, indebtedness, and employees of states, counties, cities and other governmental units."

We have conducted the census of governments, as currently structured, every five years since 1957. The census has wide acceptance as the basic and, in fact, the only source of comprehensive and uniformly classified data on the activities of state and local governments. Findings from the census of governments are used by:

--the Congress and various Federal agencies in planning and appraising programs that involve intergovernmental relations and Federal Government revenue and debt policies and as the basis for the distribution of certain Federal grant-in-aid programs;

--state legislative and executive agencies, local government officials and civic groups to compare governmental financing, employment levels, pay and operations among various areas and to improve equity in the administration of property taxes;

--financial and business firms concerned with matters such as municipal security ratings and relative levels of taxation and expenditure in particular areas; and

--economic research agencies, textbook writers and teachers to describe the nature, scale and trends of governmental activity in the United States.

The census of governments consists of four principal parts: governmental organization, governmental finance, public employment, and taxable property values. We collect most census information by mail from approximately 82,700 units of state and local government, but in some cases, we receive data on magnetic tape and computer printouts. However, we conduct field enumeration to gather much of the data needed for the survey of taxable property values and to follow up on nonrespondents and difficult cases in other areas.

The 1987 budget request provides for the governmental organization survey which identifies the universe of local governments needed to conduct the three remaining phases of the census. The budget also provides for overall planning and research that are essential for the later phases.

Planning, direction and review--This request provides for the overall planning of the census. Part of this process involves a complete review of the tabular presentation of the results of the 1982 census with a view toward improving the clarity and utility of these data.

Government finance--Funds for 1987 provide for: questionnaire evaluation, clearance, and development, a review of central data collection arrangements including possible extensions; initial request, gathering and editing of central collection and initial dispatch of mail collection forms.

Public employment--This request provides for the planning and preparation of the government employment phases. Although data collection for this phase does not begin until October 1987, planning and preparation activities in 1987 include design and printing of survey documents and procedures, preparation of computer programs, development of survey name/address files, and design of publication tables.

Governmental organization--This request provides for the completion of legislative research into local government structure and elective offices through 1986; the initiation and completion of data collection and processing for the Directory Survey of Local Governments; preparation of the final universe name and address file for the finance and employment phases of the census; and commencement of tabulation processing for the following reports: Governmental Organization and Popularly Elected Officials.

Taxable property values--Survey preparation includes: printing of survey questionnaires; conduct of legal research; training of field enumerators; field enumeration of assessed value and real property sales data; continuation of negotiations with state and local officials for access to machine-readable administrative records for local governments; writing and testing of computer programs; initiation of keying, editing, and review of data at the Data Preparation Division; and the first phases of mailout and editing of questionnaires sent to recent buyers/sellers of real estate.

Activity: Economic statistics programs
Subactivity: Census of agriculture

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Planning, direction, and review...	56 (72)	$3,340 (5,206)	75 (109)	$3,193 (4,071)	132 (140)	$4,112	132 (140)	4,112	... (...)	...
Census test......................	...	...	8 (12)	377 (387)	3 (3)	100	3 (3)	100	... (...)	...
Data collection..................	...	...	34 (50)	1,501 (1,530)	91 (96)	5,538	86 (71)	2,938	-5 (-25)	-$2,600
Data processing..................	80 (103)	1,050 (1,637)	28 (41)	1,251 (1,751)	91 (96)	3,796	91 (96)	3,796	... (...)	...
Publications.....................	4 (5)	50 (78)	...	... (40)	2 (2)	25	2 (2)	25	...	...
Sampling, statistical standards, and evaluation..................	...	...	...	... (60)	6 (6)	87	6 (6)	87	... (...)	...
Other censuses and surveys	...	...	...	...	12 (13)	498	12 (13)	498	... (...)	
Total requirements...............	140 (180)	4,440 (6,921)	145 (212)	6,322 (7,839)	337 (356)	14,156	332 (331)	11,556	-5 (-25)	-2,600

Goals and Objectives

The goals of this subactivity are to provide relevant, comprehensive statistical information on the agricultural sector of the economy at the county, state and national levels; to provide data descriptive of farm enterprises; to provide national, state and regional data on selected subjects for the year following the census; and to provide national, state, county and district level data on irrigation.

The objectives of this subactivity are to maintain and improve the relevance, quality and timeliness of information collected; to provide improved comparability of economic data from the agricultural sector and data from the other economic sectors; and to improve accessability of data for national and other geographic area analysis of the agricultural sector.

Base Programs

Title 13, U.S.C. 142 requires the census of agriculture for years ending in 2 and 7, and the census of irrigation at 10-year intervals for years ending in 7.

The census of agriculture provides statistical measures of the agricultural sector of the economy at the national, state and county level. The basic information consists of the number of farms, farm acreage, selected expenditures, value of farmland, amount of cropland harvested, production statistics for crops and livestock, inventories of livestock and equipment and farm practices (i.e., the use of pesticides, fertilizers, petroleum and other forms of energy).

The census provides agricultural data for a wide spectrum of users. For example, the U.S. Department of Agriculture (USDA) and others use the data to benchmark current data series and recurring and special sample surveys, and to prepare the farm sector accounts. The Department of Commerce uses the data to prepare national economic accounts, as well as statistics on regional income data. The Departments of Agriculture and Interior, state and local governments and others use on-farm irrigation data to evaluate water resource requirements and to formulate national and local policies in agricultural water use and water reclamation projects. Agencies such as the Farm Credit Administration use production, sales, and expenditures data to formulate and evaluate farmer loan programs and other credit programs for the agriculture sector. Local areas use census data to evaluate the need for farm support facilities such as equipment and farm suppliers, grain elevators and other marketing activities, and to develop programs that provide incentives to preserve agricultural lands. Farm associations use the data in planning programs for their membership. Agencies such as the Animal Plant and Health Inspection Service, Extension Service and Agriculture Stabilization and Conservation Service use the data to allocate resources to specific counties. The allocation of billions of dollars in financial programs is based both directly and indirectly on census information.

Fiscal year 1987 is the third year in a six-year funding cycle for the 1987 census. This funding provides for the continued preparation of the census mailing list including farm status screening of potential farm operators, completion of the final procedures for clerical processing and the specifications for computer processing and tabular presentation. We will continue planning for the Censuses of Irrigation, Puerto Rico, Virgin Islands, and Guam.

Planning, direction, and review--This line item provides for the professional, technical, and support staff required for completion of test evaluation and preparation for census mailout, preparation of the census mailing lists, development of the public awareness and program materials, and design for the 1987 census data dissemination program. This line item also includes the professional staff required to develop specifications for processing the census.

Census test--We will complete the final evaluation of the test for the mail portion of the census and issue reports on the results.

Data collection--We will acquire the source lists and construct the census mail list. This two-year process involves merging, linking, and removing duplicate records from the individual records contained on the 1982 census farm file and lists from IRS and SRS; developing statistical models to predict farm status. The objective is a census list with a high proportion of qualifying farm operators.

Data processing--We will complete final procedures for clerical processing computer processing specifications and continue systems development and programming. We will complete tabulation specifications, start programming, and continue installation and acceptance testing of CAPS II equipment.

Publications--We will continue systems design work for the procedures and processing system and complete the final specifications for publications of over 3,000 preliminary reports, a Volume 1 report for each state, and the U.S. Summary.

Sampling, statistical standards and evaluation--We will continue design of census sample and selection, weighting and imputation. We will develop quality control procedures for application to data collection and processing activities. We will complete planning for the coverage evaluation program including questionnaire and forms design, procedures, sample design and selection, and map preparation. We also will continue planning for census evaluation studies relating to census response, processing, editing, and imputation.

Other censuses and surveys--For the Censuses of Puerto Rico, Guam, Virgin Islands, and Northern Marianna's, we will complete the design and printing of the report forms and begin the preparation of training materials and the development of the mail list.

For the Census of Irrigation Organizations, we will determine the final content, identify the universe of organizations to enumerate, and print the forms and other enumeration materials.

Decrease for 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Data collection.....	91 (96)	$5,538	86 (71)	$2,938	-5 (-25)	-$2,600

This decrease will eliminate the Farm and Ranch Identification Survey. We have conducted this survey in the past two censuses to eliminate addresses on the census mail file that are either duplicated or not currently farm operations. This process was completed prior to mailing the census report forms.

The object class detail for the decrease follows:

	Grade	Number	Amount
Statistician	GS-13	-1	-$43,864
Statistician....................................	GS-12	-2	-75,886
Statistician....................................	GS-11	-1	-32,534
Survey Statistician...........................	GS-7	-1	-22,576
Total permanent positions....................		-5	-174,860
Positions other than permanent.................		-20	-443,140
Total personal compensation..................		-25	-618,000
Personnel benefits............................			-75,000
Benefits for former personnel..................			-423,000
Travel and transportation......................			-3,000
GSA space rental..............................			-360,000
Communications, utilities, and miscellaneous charges..			-787,000
Printing and reproduction......................			-280,000
Other services................................			-44,000
Supplies and materials........................			-9,000
Equipment.....................................			-1,000
Total.......................................			-2,600,000

Activity: Demographic statistics programs
Subactivity: Intercensal demographic estimates

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Intercensal demographic estimates..	72	$2,609	72	$2,554	70	$2,617	70	$2,617	...	...
	(76)	(2,639)	(83)	(2,357)	(81)		(81)		(...)	

Goals and Objectives

The goals of this subactivity are to develop and prepare updated population and income estimates for general purpose governmental units for use in the administration of Federal programs and the allocation of funds under domestic assistance programs; and to develop and prepare a variety of data to meet diverse legislative needs.

The objectives of this subactivity are to provide estimates; to investigate and resolve all data challenges resulting from the use of the estimates for the distribution of Federal funds; to provide a potential methodological framework as a basis for responding to data requests arising from the use of the estimates in grant programs; and to provide data for local government and private industry use.

Base Programs

Many Federal programs provide benefits to State, county, and local units of government through the use of distribution formulas. These programs include Community Development Block Grants (CDBG), Urban Development Action Grants (UDAG), Low Income Housing Assistance, Wastewater Treatment Construction Grants, Social Services Block Grants and Vocational Rehabilitation Grants. About $20 billion is distributed each year based on the intercensal estimates. The importance of population and income data in those formulas requires the development and use of the most current data. Congress formalized this requirement in 1976 when it enacted PL 94-521, which: (1) requires the Census Bureau to produce annual population estimates for units of general purpose government with 50,000 or more population on an annual basis, and for all other such units biennially; and (2) specifies the use of such estimates by Federal agencies in the Administration of Federal program benefits to State, county, or local units of government when population is used to determine the amounts of benefits.

A primary source of information for the intercensal estimates is administrative records already collected by the Federal Government. An amendment to the Internal Revenue Code requires taxpayers to report place of residence on their individual income tax forms. This amendment makes it possible to provide current estimates for states, counties and the local governmental units eligible to participate in Federal benefit programs. In terms of reliability, the population estimation system using administrative records yields results that compare favorably with estimates prepared by other methods for states and counties. Current estimates provide geographic detail and a level of accuracy that are not available from any other known source (short of a full-scale census). The data have a level of accuracy in line with the quality level recommended or proposed for figures required for a variety of legislative purposes. We are using the findings of recent evaluation studies to make further improvements in the estimates.

We will research and resolve all data challenges resulting from the use of the estimates by Federal agencies. The review process involves checking for both clerical and logical error on all input data including births, deaths, institutional population, military station strength and barracks population, and migration data. In addition, we review any supporting data supplied by the challenging government. If necessary, the Census Bureau's local contacts--developed through the Federal State Cooperative Program for Local Population Estimates--will be asked for comments plus any new data available on a challenging area's current population. We have instituted a review, challenge and appeal process whereby local areas can bring us their challenges, both informally and formally, before they are submitted to a hearing examiner.

Beyond their use in the distribution of Federal funds, the estimates of geographic distribution of the population provide data that are needed to make decisions on the location of retail outlets and manufacturing establishments, state and local government services, and planning of utility service. The recognition of this general purpose nature of the population estimates has been formalized in OMB Statistical Policy Directive No. 13 which requires the use of the Bureau's most recent population estimates by all Federal programs that make use of total population data in the distribution of Federal benefits.

Activity: Demographic statistics programs
Subactivity: Decennial census

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Planning, direction, and review....	121	$5,564	121	$6,474	211	$10,350	211	$10,350	...	...
	(127)	(5,030)	(171)	(6,499)	(211)	(10,350)	(211)	(10,350)		
Test censuses and dress rehearsal..	152	11,303	153	16,912	515	30,779	515	30,779	...	...
	(326)	(12,064)	(743)	(16,978)	(1,141)	(30,779)	(1,141)	(30,779)		
Data collection....................	16	589	47	1,457	76	2,575	76	2,575	...	...
	(17)	(517)	(49)	(1,463)	(73)	(2,575)	(73)	(2,575)		
Operations.........................	78	3,657	122	13,256	578	21,360	578	21,360	...	...
	(82)	(3,416)	(565)	(13,308)	(579)	(21,397)	(579)	(21,397)		
Product development and data dissemination....................	35	2,534	78	3,821	95	4,374	95	4,374	...	...
	(37)	(2,948)	(89)	(3,836)	(97)	(4,374)	(97)	(4,374)		
Promotion and outreach.............	26	1,599	35	3,075	78	3,899	78	3,899	...	...
	(27)	(1,631)	(41)	(3,087)	(78)	(3,899)	(78)	(3,899)		
Statistical research and evaluation	77	2,622	130	6,250	150	5,562	150	5,562	...	...
	(81)	(2,482)	(177)	(6,274)	(151)	(5,562)	(151)	(5,562)		
Sample redesign....................	155	7,145	...	...	...	...	...	...	...	...
	(188)	(6,999)	(...)	(186)	(...)	(...)	(...)	(...)		
Total requirements.................	660	35,013	686	51,245	1,703	78,899	1,703	78,899	...	...
	(885)	(35,087)	(1,835)	(51,631)	(2,330)	(78,936)	(2,330)	(78,936)	(...)	(...)

Goals and Objectives

The goals of this program are to provide official population counts needed for apportionment and redistricting of the U.S. House of Representatives and other legislative bodies; and to provide comprehensive and accurate population and housing statistics for the Nation, states, counties, places, census tracts, and city blocks.

The objectives of this program are to plan, test, and evaluate alternative approaches for the preparation, enumeration, processing, and tabulation of the 1990 census.

Base Program

Title 13 U.S.C. 141 requires the decennial census. The census involves the enumeration of the total population and housing of the 50 states, the District of Columbia, Puerto Rico, Virgin Islands, Guam, and other areas of United States sovereignty or jurisdiction. We also collect information for a number of demographic characteristics such as age, sex, race, ethnic origin, education, unemployment, occupation, and income, as well as housing characteristics such as fuel usage and value of property. The decennial census produces important population and housing data for the thousands of political and statistical areas across the country. Government agencies, businesses, educational institutions, and individual citizens use decennial data for decisions affecting almost every element of American life.

We will determine the design of the 1990 census by using the results of our research, testing, and evaluation of alternative techniques and methodologies. We will select the combination of techniques and methodologies that most effectively accomplish the program goals for 1990. The program goals are:

- o to meet all legal deadlines for providing data for reapportionment and redistricting;
- o to conduct the basic 1990 census without increasing the per housing unit cost in constant dollars;
- o to expedite the availability of the data to users;
- o to maintain a high rate of overall coverage, improve the accuracy of small-area data, and reduce the undercount differential for population groups and geographic areas;
- o to maintain confidentiality; and
- o to strike an appropriate balance between the length of the questionnaire and information needs.

Fiscal 1987 marks a transition in the census budget cycle. The primary emphasis will shift from testing to decision-making and actual preparatory work for the 1990 census. We will identify the best balance of accuracy, costs, and timely provision of data, and make many major program decisions. We will identify, refine, and begin preparatory work on techniques and methodologies identified as feasible approaches to the 1990 census. Specifically, we will evaluate the 1986 test censuses, conduct the 1987 test censuses, conduct special purpose tests, submit proposed questionnaire topics to Congress, plan and prepare for the 1988 dress rehearsal, and continue activities for delineating geographic areas.

(NOTE: The 1987 request for the Decennial Census subactivity depends on associated requests for the Geographic Support and Data Processing Systems activities.

Planning, direction, and review--The request provides for overall program design, direction, and coordination. Planning activities will involve preparation and approval of work plans, issue papers, decision memoranda, and other means of delineating program objectives. Planning will cover all aspects of the decennial program, including the examination of methodological alternatives to be tested for feasibility, accuracy, and cost.

We will refine the interoffice communications network for information dissemination covering program status and expendi-
and operation of an automated management information system that will be crucial for coordinating all census planning and
tures, as well as procedural and schedule changes. Program coordination will include seminars, conferences, cost analysis
preparatory efforts.

Test censuses and dress rehearsal--Continued improvement in data quality and efficiency require testing of new methods and techniques. Test objectives for 1987 will fall into the following categories: automation, coverage improvement, outreach, address list development and questionnaire delivery, field operations and management, geographic, coverage measurement, follow-up procedures, questionnaire content and design, and American Indian enumeration.

Activities will include evaluation 1986 test census objectives such as rural address list construction and questionnaire delivery methods, coverage measurement techniques, and techniques for enumerating American Indian reservations. We will complete planning and begin preparatory work and initial operations such as, prelist and advanced post office check for the 1988 dress rehearsal.

Data collection--We will assess the feasibility, risks, and benefits of several new data collection techniques and associated administrative procedures that have the potential for lower 1990 census costs. We will decide on sources for recruiting temporary personnel by taking into consideration the recommendations and support offered by National organizations and companies in recruitment efforts, publicity, referrals, and executive loan programs. We will determine and refine training techniques and methods, and we will assess the effects of different methods of compensation such as piece-rate versus hourly-rate bonuses for superior work and production and higher rates of pay for more difficult assignment areas. We will begin preparatory work to establish the 1990 census network of district offices.

We will examine other ways to prevent turnover and increase the productivity of temporary personnel. One method is the use of part-time workers and restructuring of jobs so that temporary workers will be more highly motivated and provided with more marketable skills for future jobs. We also will examine greater use of state and local resources such as the availability of local office space.

Early in 1987, we will identify the training methodology for 1990, and we will determine the extent of the technologies that will be used in the management of data collection activities. In 1987, we will identify the data collection process for each geographic area, delineate collection and processing office boundaries, and begin developing regional office support staff in preparation for the 1990 prelist operation.

Operations--Control of the enumeration workload and related costs requires the development of a complete address control file. By improving the accuracy of the geographic referencing system and developing a complete housing unit inventory before the census, we will be able to update the address control file efficiently and correct errors in the assignment of these addresses to geographic areas.

By 1987, we will have selected the methodology and computer technology for updating the address file. If we decide to purchase commercial mailing lists, we will begin the procurement process to obtain vendor(s) lists.

We will continue activities to delineate areas for use in the automated geographic data base which combines maps, address ranges, and the census geographical areas. For example, we will delineate geographic areas for collection activities, and delineate political, statistical, and administrative areas required for tabulation activities. We will define the geographic products required to support data collection and tabulation activities.

Changes and advances in technology provide the potential to convert questionnaire data into machine-readable format during the data collection process. This will allow us to provide more timely, better quality data to users.

In addition to the United States, the decennial census will cover the Commonwealth of Puerto Rico and the Outlying Areas, American Samoa, Guam, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and the Virgin Islands. We will consult Government officials regarding data needs for each area. We will develop questionnaire design and content to accommodate local conditions, and we will consider specialized collection and processing procedures and techniques to accommodate the unique nature of these areas.

Subsequent to the decennial census, we may conduct small-scale, follow-on surveys similar to those conducted after the 1980 census. We would take a sample of the housing units or persons enumerated during the census and obtain data to analyze and implement specific programs. In 1987 we will consider the size of the sample surveys and the characteristics to be examined.

Product development and data dissemination--The determination of questionnaire content and design will result from continuing consultation with Congress, Federal agencies, state and local governments, and private users. The National Content Test in 1986 will provide different question formats to identify those which result in the greatest response accuracy. We will evaluate the results of this test in 1987. We will continue to meet with public officials to solicit their recommendations on questionnaire content and design, and we will conduct tests to reduce the operational burden and costs. We will analyze different options for content sampling, including multiple samples. In April 1987, we will submit question topics to Congress for approval. Also, we will receive plans from the states for drawing voting district boundaries for P.L. 94-171 (redistricting).

We will examine the use of greater automation and new technologies to develop tabulation specifications and software at an earlier point in the census process. This should expedite the delivery of data products to users. We will prepare and test alternative techniques and systems for designing and producing the data products. We will consider changing the data dissemination by taking into account the increased availability and use of microcomputers and the growing need for customized tabulations.

Promotion and outreach--Our proposed outreach and promotion efforts in 1987 are to encourage the cooperation of the public for the 1990 census. Increased public cooperation lowers the total cost of the census and increases the accuracy of the data. These efforts involve three types of activities. First, we will continue to solicit views and recommendations for 1990 data products from national organizations, formal census advisory committees, and data users. Secondly, we will use the community outreach program to develop contacts with various community-based organizations and other local opinion makers for advice early enough in the planning phase to allow for possible integration into the 1990 census efforts. We will seek opinions to foster the cooperation of the general public and develop new ways to encourage the cooperation of local community organizations. In 1987, we will increase activities which promote the census among community groups. The outreach program also will serve as a source for identifying and recruiting qualified persons to work in the field offices. The third major activity is research and development of various promotion ideas based on public attitudes toward the census. We will determine the most effective ways to contact special population groups such as minorities and persons who do not speak or read English. We will test possible improvements in outreach and promotion techniques in the 1987 test census and the 1988 dress rehearsal.

Statistical research and evaluation--We will examine, test, and evaluate the feasibility of using statistical techniques for completing the census enumeration and processing. This process includes the development of models for disclosure analysis, automated name matching, automated content coding, sampling of collection activities such as coverage improvement, and editing and imputing data. We will continue work on the research and evaluation of techniques for measuring the undercount and developing subnational coverage measurements by various population characteristics. We will evaluate statistical measures and methods for processing the data. The activities include the analytical review and evaluation of the statistical, legal, and perceptual implications of adjusting the census, as well as testing different methodologies for implementing the adjustment process.

We will complete development of an automated matching system to assist in coverage measurement studies, and we will define the 1990 coverage evaluation progam.

Activity: Sample redesign
Subactivity: Sample redesign

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Sample redesign....................	... (...)	...	... (...)	...	... (...)	...	14 (15)	$650	+14 (+15)	+$650

Goals and Objectives

The goal of this activity is to improve sample efficiencies and maintain confidence in the major socioeconomic indicators produced by the Federal government.

The objectives of this activity are to research and modify the sample design of major current surveys to improve the quality of data and the cost effectiveness of the collection, tabulation and dissemination processes.

	Increase for 1987 1987 Base Perm. Pos.	 Amount	1987 Estimate Perm. Pos.	 Amount	Inc.(+) Dec.(-) Perm. Pos.	 Amount
Sample redesign......................	... (...)	...	14 (15)	$650	+14 (+15)	+$650

This proposal provides for sample redesign and estimation for the major current demographic surveys based on the 1990 census.

The Census Bureau conducts major household surveys that provide essential data for the public and private decision making process. These data form the basis for a large portion of the socio-economic indicators produced by the Federal Government. The surveys include the Current Population Survey (sponsored by Census and the Bureau of Labor Statistics), the Annual Housing Survey (Department of Housing and Urban Development), the National Health Interview Survey (National Center for Health Statistics), the Consumer Expenditure and Point of Purchase Surveys (Bureau of Labor Statistics), the National Crime Survey (Bureau of Justice Statistics), the Survey of Income and Program Participation (Census), and the Housing Vacancy Survey (Census).

We are completing the implementation phase of survey redesign based on the 1980 census. We expect the redesign to produce cost savings and equivalent efficiency gains over a 10 year period that will exceed the cost of the investment and maintain public confidence in the statistics produced from the surveys. Because of the long lead times required for the work, we should start in 1987 to achieve comparable benefits in a 1990 redesign and that redesign should be implemented in a timely manner. Furthermore, we can implement improvements from some of this work as soon as it is completed and create short-term cost/efficiency gains.

We will concentrate on three areas: (1) testing of a new sample segmenting procedure, (2) the use of administrative records for several estimation and design applications, and (3) the causes, effects, and ways of alleviating undercoverage in surveys.

The object class for the increase follows:

	Grade	Number	Amount
Supervisory survey statistican......................	GM-14	1	$44,430
Supervisory computer systems analyst................	GM-13	1	37,599
Survey statistician.................................	GS-12	2	63,238
Computer programmer.................................	GS-12	3	94,857
Mathematical statistician...........................	GS-12	2	63,238
Mathematical statistician...........................	GS-11	2	52,762
Statistical assistant...............................	GS-06	1	16,040
Computer assistant..................................	GS-05	1	14,390
Secretary-typist....................................	GS-05	1	14,390
Total salaries......................................		14	400,944
Less lapse..		-4	-100,236
Permanent positions.................................		10	300,708
Positions other than permanent......................		5	100,694
Other personnel compensation........................		2	101,598
Total personnel compensation........................		17	503,000
Personnel benefits..................................			55,000
Travel and transportation of persons................			17,000
GSA space rental....................................			17,000
Communication, utilities and miscellaneous charges..			30,000
Printing and reproduction...........................			4,000
Other services......................................			17,000
Supplies and materials..............................			7,000
Total...			650,000

Activity: Geographic support
Subactivity: Geographic support

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Geographic support...............	509 (649)	$19,127 (16,081)	524 (681)	$18,622 (21,726)	439 (570)	$16,115	439 (570)	$16,115	... (...)	...

Goals and Objectives

The goal of this activity is to provide geographic support services that meet the requirements of the periodic censuses and programs.

The objectives of this activity are to portray accurate boundaries of all the legal and statistical areas for which data are tabulated, along with the roads and other relevant map features required for analysis and field operations; to document the relationship of each type of geographic area to all other types; to provide for the accurate assignment of households and economic establishments to those geographic areas; and to automate many of these geographic support services in cooperation with the Geological Survey, U.S. Department of the Interior to avoid any duplication of Federal efforts in this area.

Base Program

Automation of the geographic support activity is a critical element in the preparations for the 1990 Decennial Census. This approach supports the Census Bureau's goals for controlling costs and improving timeliness of information from the 1990 Decennial Census through increased use of automation. Completion of nationwide geographic file building activities provides the capability for efficient production of high-quality maps, rapid assignment of residential and business addresses to the correct geographic location, and automation of many other aspects of the decennial census data collection/processing/publication process. New geographic materials must be ready by 1988 to support preparatory activities essential for a successful 1990 Decennial Census.

This is the final year in a four-year allocation of additional resources to provide for a fundamental improvement in the way geographic materials are prepared for the Nation. The improved approach eliminates the complex, repetitive, clerical processes of the past that caused problems and contributed to the late delivery and technical shortcomings of the 1980 Decennial Census geographic products. We will provide an integrated geographic system to support all Census Bureau periodic programs and enhance our ability to deliver timely geographic materials and services. We are scheduling geographic file-building activities to meet the needs of the 1990 Decennial Census.

In 1987 we will complete the conversion of geographic files from several independent sources and consolidate updated geographic information gathered in consultation with state, county, and local governments across the Nation. This is the year for completing the processing of computer-readable map bases from the U.S. Geological Survey, including the completion of initial map updating activities for rural and urban areas. It also is the year for continuing the testing and revision of major components of the computer systems for automated production of geographic materials needed in the 1988 Dress Rehearsal.

The program for building the nationwide geographic file includes the collection of basic geographic information such as boundary locations for counties and incorporated places, the preparation of that information for computer files and maps, the editing of the resultant computer files and maps for consistency and accuracy, the development of systems for production of maps and other geographic products that display the information in appropriate forms for data collection and tabulation activities, and the preparation of computer systems for assignment of households and economic establishments to the correct geographic areas. These activities are necessary for the accurate presentation of data by geographic area for the decennial and economic censuses, other statistical programs of the Census Bureau, and legislated programs of Federal and state governments.

We update legal boundaries for counties and incorporated places with 2,500 or more inhabitants by asking the appropriate local officials to record map changes that result from annexations, detachments, new incorporations or disincorporations. We have had a response rate exceeding 95 percent for the Boundary and Annexation Survey and almost half of the areas have reported one or more changes.

We maintain maps with street and road patterns for the entire country through a program of source material acquisition that permits the recording of changes resulting from new development and reconstruction. These updated maps serve as the base for recording legal boundaries and determining the geographic areas.

We prepare and maintain address reference files for the major urban areas of the Nation. These files permit the rapid assignment of over 60 percent of all household and economic establishment addresses to the correct geographic areas with only limited staff intervention. We update the geographic base files through a program of source material acquisition. This process permits the recording of relationships between generalized address ranges, streets and roads on maps, and the geographic area boundaries required for data tabulations. We also record an x and y (latitude and longitude) coordinate value for every street and road intersection.

The automated files will provide the basic geographic information (boundaries, streets and address ranges) needed to assign housing units and economic establishments to the correct geographic location. The files will classify that geographic location according to the full set of tabulation areas required for the publication of data. These basic automated geographic files will be available for use in generating the geographic products required for 1990 Decennial Census operations, 1992 economic and Agriculture Census operations, post-1990 survey redesign operations, state and local redistricting operations and other purposes.

Activity: Data processing systems
Subactivity: Data processing systems

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Data processing systems..........	...	$11,965	...	$15,276	...	$43,562	...	$57,187	...	+$13,625
	(...)	(11,636)	(...)	(20,174)	(...)		(...)		(...)	

Goals and Objectives

The goals of this activity are to provide a computer environment that is efficient, responsive and fully adequate for processing and generating economic and demographic statistics. Specific objectives are: (1) to provide total ADP-related support and operational services for the processing of both current and census programs; (2) to provide effective planning and implementation of a comprehensive, long-range ADP acquisition program; and (3) to increase productivity by providing computer (and related) tools that will enable the automation of manual and other labor-intensive functions.

Base Program

This program provides for the rental or purchase of equipment and other supporting activities related to the Bureau's general purpose computer facility. Detailed studies of work load and hardware/software requirements provide a choice of cost-effective alternatives, with decisions to lease or purchase specific equipment based on comparisons of costs and the expected periods of usage.

We will continue to concentrate long-range planning activities on obtaining automated system support for the conduct and processing of the 1990 Decennial Census, replacement of outmoded computer facilities, and increased automation of other activities both at headquarters and field locations. We will acquire the facilities and services in accordance with Department of Commerce guidelines and a long-range ADP plan.

We plan to continue the following activities during 1987:

Site preparation ($250)--This component provides for continuing renovations and modifications to the physical areas housing the computers and related ADP equipment, including the completion of the phased acquisition of additional air conditioning capacity.

"Bridge" computer system ($5,203)--This component provides for continuing lease-to-ownership payments and associated maintenance and software support for the large-scale system acquired in 1983. This system replaced obsolete hardware and effectively serves as a "bridge", or interim, resource pending future equipment acquisitions planned for the late 1980s.

Field automation ($341)--This component provides for continuing maintenance expenses for equipment dedicated to the automation of many of the labor-intensive, administrative operations currently performed in the regional offices. These systems should increase the efficiency of general office functions such as budget, payroll, and personnel administration.

Geographic support system (GSS)($16,832)--This component provides for continuing support of an automated geographic-cartographic production system. It includes continued maintenance of the previously acquired digitizing systems and the acquisition of remaining equipment components. This overall system will provide for the storage, maintenance, and updating of the Nation's geography on machine-readable media.

Printers ($353)--This component provides for continuing lease-to-ownership and/or maintenance expenses associated with the on-line and off-line printing subsystems.

Mini-computers ($67)--This component provides for continuing maintenance expenses associated with a small complement of graphics and publication-related computer terminals.

Computer-output-to-microform device (COM) ($584)--This component provides for the replacement of a device that produces both microfilm and microfiche from magnetic tape. This capability reduces the increasing requirements for hard-copy printed output and, consequently, both lessens the need for large amounts of storage space for paper and improves turnaround to the end user. Heavier-than-expected use of the current system has caused problems and this action will stem the increasing difficulty of maintaining this hardware.

Distributed communications processors (DCP) ($100)--This component provides for continuing maintenance expenses associated with two communications handlers. These systems automatically balance the massive amount of terminal communications among the Bureau's three large-scale mainframes and, consequently, will enhance response to all interactive terminal users (and associated programs).

Uninterruptible power supply (UPS) ($54)--This component provides for continuing maintenance expenses for the UPS system as well as the 15-year program for the phased replacement of the battery components. This system ensures sufficient power to permit an orderly shutdown of the computer systems in the event of power interruptions. It also protects the computer systems from both momentary power surges and "brownouts."

Transition support ($250)--This component continues the structured transition from existing software systems to machine-independent software, and it also includes the acquisition of specialized, user-assistance software support. Specifically, it will assist in: (1) continuing the transition to standard programming languages and data sets, including the development and application of appropriate standards, procedures, and other aids, and (2) providing productivity enhancements (for the programmer and nonprogrammer alike) through the acquisition of more "user-friendly" software tools, techniques and associated support.

Decennial data capture (DDC) ($3,531)--This component provides for the continued investigation, development, and final selection of equipment technology designed to support the most effective data collection methodolgy for the 1990 Decennial Census.

Disk subsystems ($300)--This component provides for continuing maintenance expenses associated with various disk subsystems that provide rapid, random access to individual segments of data and allow the processing and storage of large quantities of on-line data. These subsystems reduce tape handling (and associated human errors), provide an environment necessary to promote interactive processing by nonprogrammers, and decrease turnaround time for the testing and use of computer programs.

Interactive terminals ($400)--This component provides for the continued replacement of outmoded terminals as well as the acquisition of additional units. These devices are integral components of our overall plan to enhance the productivity of programmers and nonprogrammers. They provide some of the tools and techniques necessary for both program development and the automation of existing manual procedures. Coupled with "user-friendly" software, increased on-line data storage, and effective training, this equipment provides the environment necessary to increase productivity.

Data Preparation Division (DPD) program automation ($137)--This component provides for the continued maintenance of automation systems for many of the manual processes at the Jeffersonville, Indiana processing facility. This equipment supports the processing, monitoring and flow control of non-decennial questionnaires. It also should have dramatic applicati in the areas of both bar code inventory and publication inventory systems.

Office automation ($172)--This component provides for the continued maintenance of office automation equipment at headquarters. This equipment is dedicated to automating many of the manual office processes and procedures and encompasses such capabilities as: stored logic, with communications; data base management; data entry; general data processing; facsimile (electronic mail); and administrative report/record processing.

UNIVAC 1100/74 ($182)--This component provides for continuing maintenance and software support expenses associated with this recently-upgraded large-scale computer system. This system supported the 1982 Agriculture and Economic Censuses processing and, currently, is dedicated to handling the extensive work loads associated with the geographic digitizing activities.

Integrated statistical laboratory ($100)--This component provides for the continuing maintenance and associated software expenses in support of the ISL. This system contains a network of terminals and microcomputers tied to a stand-alone minicomputer. Because of its exclusive dedication, it provides for both the high-speed interactive capability and the use of highly-sophisticated user friendly software needed for effective and timely statistical analyses.

Tape drives ($336)--This component provides for the continued maintenance of tape drive subsystems. This equipment, allows the incorporation of state-of-the-art technological improvements in tape movement speeds and recording methodologies.

Publication support system ($500)--This component combines two activities previously identified separately as graphics development and publications preparation. Collectively, this activity provides for the continued development/enhancement of a Bureauwide system concerned with the interactive preparation of publications, including a standardized computer-generated, quality graphics capability. The system includes both the automation of those steps that must be performed before text and tables are incorporated into the final publication process and the preparation of these products (and graphic representations) in final production-ready form. Ultimately, the system will allow significant improvements in the overall timeliness of data releases.

Online data storage ($6,570)--This component provides for both the replacement of subsystems that have reached the end of their systems life, and the acquisition of additional storage capacity. While the replacement units are designed to stem the growing maintenance and reliability problems (and associated costs) of the aging systems, the additional units are in response to the need for online storage capacity related to our expanding interactive processing environment. This additional capacity will also improve production throughput by reducing file management overheads and, at the same time, will result in much less tape handling (and the associated human errors).

Computer replacement #1 ($7,300)--This component provides for the acquisition of a computer mainframe to replace the system acquired in 1980. This replacement will give the Bureau the ability to keep pace with the latest-technological advances in computer hardware and software, and it also will provide the additional capacity needed to process the expanding survey and census workload requirements.

Increase for 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Data processing systems......................	...	$43,562	...	$57,187	...	+$13,625
	(...)		(...)		(...)	

This request provides for the following activities which involve the acquisition of equipment needed to support the most effective methodology for the 1990 Decennial Census and the replacement of outdated equipment:

Decennial data capture (DDC)($9,630)--This component was previously budgeted for 1989. This request will provide for equipment procurement earlier than originally planned and ensure the availability of all prototype systems and items with long procurement lead times. While most of the production systems expenditures will be later, certain major production items such as mailing piece sorters will be selected and their construction/acquisition will begin during 1987.

The shift of funds is essential to the procurement of the following equipment: data entry (for the pre-list operation); check-in laser sorters (because of their lengthy lead times) optical scanning devices and automated camera components; and hardware related to testing the automated office concept.

Data entry replacement ($3,995)--This component provides for the complete replacement of the data entry equipment at the Jeffersonville, Indiana processing facility. This procurement has been shifted forward from its original schedule in 1989 because the existing systems are technologically outdated and the overall support of these units is seriously deficient. The replacement systems will improve processor cycle times and the capability to create more comprehensive local edit and data processing routines. Improved program coding software on new systems makes it easier to implement automated clerical and document controls, local programming and formatting.

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Periodic censuses and programs

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimates Pos.	1987 Estimates Workyears	1987 Estimates Amount	Inc.(+) or Dec.(-) Pos.	Inc.(+) or Dec.(-) Workyears	Inc.(+) or Dec.(-) Amount	Emp. 12/31
11.0 Personnel compensation:										
11.1 Full-time permanent positions..	2,829	1,951	$41,647	2,847	1,951	$42,099	+18	...	+$452	1,648
11.3 Positions other than full-time permanent....................	1,163	1,912	35,706	1,168	1,927	35,715	+5	+15	+9	486
11.5 Other personnel compensation...	...	...	407	...	...	445	...	...	+38	...
11.8 Special personal services payments......................	...	...	24	...	...	24	...	...	...	...
Total.......................	3,992	3,863	$77,784	4,015	3,878	78,283	+23	+15	+499	2,134
Other objects:										
12.1 Personnel benefits.............			10,513			10,669			+156	
13.0 Benefits for former personnel..			2,247			1,757			-490	
21.0 Travel and transportation of persons......................			3,023			3,034			+11	
22.0 Transportation of things.......			102			102			...	
23.1 GSA space rental...............			3,894			3,482			-412	
23.2 Rental payments to others......			60			60			...	
23.3 Communications, utilities, and miscellaneous charges........			10,069			9,490			-579	
24.0 Printing and reproduction......			3,879			3,662			-217	
25.0 Other services.................			19,260			19,275			+15	
26.0 Supplies and materials.........			2,876			2,931			+55	
31.0 Equipment......................			39,173			52,810			+13,637	
Total requirements............			172,880			185,555			+12,675	

Justification by Object Class
(Dollar amounts in thousands)

Object Class		1987 Base			1987 Estimates			Inc.(+) or Dec.(-)			Emp. 12/31
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11.1	Full-time permanent positions										
	General schedule.............	2,820	1,942	$41,049	2,838	1,942	$41,501	+18	...	+$452	1,639
	Senior executive service.....	9	9	598	9	9	598	...	...	...	9
	Total, full-time permanent positions	2,829	1,951	41,647	2,847	1,951	42,099	+18	...	+452	1,648
11.3	Positions other than full-time permanent										
	General schedule.............	1,163	1,912	35,706	1,168	1,927	35,715	+5	+15	+9	486
11.5	Other personnel compensation										
	Overtime.....................	...	...	407	...	...	445	...	...	+38	
11.8	Special personal services payments.....................	...	...	24	...	...	24	...	...	...	
12.1	Personnel benefits										
	Civil Service Retirement.....			5,586			5,683			+97	
	Federal Insurance Contribution Act (FICA)............			1,719			1,750			+31	
	Health Insurance.............			2,300			2,316			+16	
	Life Insurance...............			419			427			+8	
	Employees' Compensation Fund.			489			493			+4	
	Total, personnel benefits..			10,513			10,669			+156	
13.0	Benefits for former personnel			2,247			1,757			-490	

Object Class	1987 Base			1987 Estimates			Inc.(+) or Dec.(-)		
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
21.0 Travel and transportation of persons									
Per diem......................			$739			$744			+$5
Air fare......................			623			627			+4
Other common carrier.........			364			366			+2
Privately-owned automobiles..			1,185			1,185			...
GSA vehicles.................			64			64			...
Other........................			48			48			...
Total, transportation of persons....................			3,023			3,034			+11
22.0 Transportation of things									
Freight.......................			79			79			...
Express.......................			23			23			...
Total, transportation of things.................			102			102			...
23.1 GSA space rental.............			3,894			3,482			-412
23.2 Rental Payments to others....			60			60			...
23.3 Communications, utilities, and miscellaneous charges									
Federal Telecommunications System......................			367			367			...
Other telephone, telegraph, and teletype services......			582			582			
Postal services by USPS......			2,755			2,152			-603
Rent payments to other than GSA.........................			...			...			...
Rental of automatic data processing equipment..........			4,373			4,373			...
Rental of office copying equipment...................			547			547			...
Other equipment rental.......			1,445			1,469			+24
Total, communications, utilities and other rent.			10,069			9,490			-579

Object Class	1987 Base			1987 Estimates			Inc.(+) or Dec.(-)		
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
24.0 Printing and reproduction									
Publications			$179			$179			...
Public use forms			1,622			1,622			...
Envelopes			886			886			...
Other printing and reproduction			1,192			975			-$217
Total, printing and reproduction			3,879			3,662			-217
25.0 Other services									
Training:									
University			97			97			...
Office of Personnel Management			48			48			...
Other			42			42			...
Maintenance of equipment			3,681			3,711			+30
GSA reimbursable services			1,001			1,001			...
Centralized Departmental Services			957			957			...
Other Federal Agencies:									
Social Security Administration			28			28			...
Internal Revenue Service			154			154			...
Bureau of Economic Analysis			893			893			...
Local governments			963			963			...
Other non-governmental contracts			11,396			11,381			-15
Total, other services			19,260			19,275			+15

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimates Pos.	1987 Estimates Workyears	1987 Estimates Amount	Inc.(+) or Dec.(-) Pos.	Inc.(+) or Dec.(-) Workyears	Inc.(+) or Dec.(-) Amount
26.0 Supplies and materials									
ADP supplies..................			$55			$55			...
Envelopes.....................			66			69			+$3
Tabulating cards and paper....			1,194			1,223			+29
Office supplies...............			142			142			...
Other specialized supplies and materials................			1,419			1,442			+23
Total, supplies and materials.....................			2,876			2,931			+55
31.0 Equipment									
ADP equipment.................			29,585			43,210			+13,625
Office machines and equipment.........................			530			530			...
Furniture and fixtures........			138			138			...
Computer tape.................			2,497			2,497			...
Other equipment...............			6,423			6,435			+12
Total, equipment..............			39,173			52,810			+13,637

Activity/Subactivity Change Crosswalk
(Dollar amounts in thousands)

Format of Fiscal 1986 Congressional Budget Submission		Format of Fiscal 1987 Congressional Budget Submission	
Appropriation/Activity/Subactivity	Amount (1987 Request)	Appropriation/Activity/Subactivity	Amount (1987 Request)
Periodic censuses and programs:		Periodic censuses and programs:	
Economic statistics programs:		Economic statistics programs:	
Economic censuses	$13,179	Economic censuses	$13,179
Census of governments	5,352	Census of governments	5,352
Census of agriculture	11,556	Census of agriculture	11,556
Demographic statistics programs:		Demographic statistics programs:	
Intercensal demographic estimates	2,617	Intercensal demographic estimates	2,617
Decennial census	79,549	Decennial census	78,899
		Sample redesign	650
Geographic support	16,115	Geographic support	16,115
Data processing equipment	57,187	Data processing systems	57,187
Total	185,555	Total	185,555

Mr. **Smith**. We have the Director of the Census, John Keane. Do you want to highlight your statement, Mr. Keane?

PROGRAM HIGHLIGHTS

Mr. **Keane**. Thank you, Mr. Chairman. I shall. My highlights will follow along, in case you just have a long copy, the major headings.

Beginning with the program highlights, the 1987 budget request includes $91,675.000 for salaries and expenses and $185,555,000 for periodic censuses and programs.

SALARIES AND EXPENSES

The request for the current statistical programs includes a net increase of $1,725,000 for adjustments to base and a net decrease of $450,000 for program changes.

As part of our continuing effort to improve data on the service sector, we request an increase of $350,000 and four positions to provide for expanded coverage of the transportation sector. We will collect more extensive data on the trucking industry or cover additional transportation industries.

An increase of $600.000 and 11 positions will maintain the accuracy and quality of the new international harmonized system that contains information on import, export, and domestic production. The new system will have a significantly larger number of codes, and it will require more frequent changes. The additional funding will provide for those recurring changes.

The increases are offset by two program reductions. A decrease of $400,000 will reduce coverage of the Quarterly Financial Report. The other decrease of $1,000,000 and 23 positions will reduce the number of companies and establishments covered in the Standard Statistical Establishment List.

PERIODIC CENSUSES AND PROGRAMS

The 1987 request for the periodic censuses and programs appropriation includes $71,454,000 for planned cyclical changes in the programs, a net reduction of $4,174,000 for adjustments to base, and $12,675,000 for other program changes. I will provide highlights of the major programs.

ECONOMIC CENSUSES

The budget includes $13,179,000 for the third year of planning and preparation for the 1987 economic censuses. An increase of $1,000,000 and nine positions will expand the census of business to include hospitals and additional transportation industries.

CENSUS OF AGRICULTURE

The budget includes $11,356,000 to continue planning and preparations for the 1987 census of agriculture. The budget contains a decrease of $2,600,000 and five positions that will eliminate the Farm and Ranch Identification Survey. We will use alternative methods to update addresses on the census mail file and remove nonfarm operations.

1990 DECENNIAL CENSUS

Preparations for the 1990 decennial census are on course and on schedule. We are in the midst of 1986 test censuses in Mississippi and Los Angeles as well as the national content test, and we are well along in preparations for a test census in North Dakota in 1987. We have also begun preparations for the dress rehearsal in 1988.

The budget includes $78,899,000 for the census. Fiscal year 1987 marks a transition in the census budget cycle. we will shift primary emphasis from testing to decisionmaking and preparatory work on techniques and methodologies selected for the 1990 census. Specifically, we will complete evaluations of the 1986 test censuses, conduct the 1987 test census, conduct other special purpose tests, submit proposed questionnaire topics to Congress, plan and prepare for the 1988 dress rehearsal and census address list development, and continue work on census geographic areas.

In 1987 we will be making major decisions for the 1990 census. These decisions need to be made early enough to allow time for a true dress rehearsal of procedures in 1988. The dress rehearsal will help us refine procedures and reduce the inherent uncertainty and risk facing this major logistical and statistical operation that is done only once every 10 years.

SAMPLE REDESIGN

The budget proposes $650,000 for revisions to the statistical samples used for monthly, quarterly, and annual surveys. Updated samples are essential for maintaining the quality of demographic statistics. This increase provides for the start of the planning process required for the timely redesign of major demographic surveys based on results of the 1990 census.

GEOGRAPHIC SUPPORT AND DATA PROCESSING SYSTEMS

The budget includes $16,115,000 for geographic support activities. We will complete the conversion of geographic files from a clerical process to a fully-integrated, automated geographic support system.

Our request for continued improvements in data processing capabilities and support of existing equipment and facilities totals $57,187,000. This amount includes an increase of $13,625,000 to provide for decennial data capture equipment, and replacement of obsolete data entry equipment at the Jeffersonville, Indiana, processing facility.

This concludes my prepared statement. Thank you, Mr. Chairman.

[The statement of Mr. Keane. follows:]

STATEMENT BY THE DIRECTOR OF THE
BUREAU OF THE CENSUS
John G. Keane
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES

Mr. Chairman, and Members of the Committee:

Thank you for this opportunity to present the 1987 budget for the Bureau of the Census.

PROGRAM HIGHLIGHTS

The 1987 budget request of $277,230,000 covers the Census Bureau's two appropriations. Our request includes $91,675,000 for salaries and expenses and $185,555,000 for periodic censuses and programs.

SALARIES AND EXPENSES

The request for the current statistical programs represents a $1,275,000 increase over the 1986 appropriation. This includes a net increase of $1,725,000 for adjustments to base and a net decrease of $450,000 for program changes.

All program changes are included in the Current Economic Statistics activity. We are proposing two program increases. As part of our continuing effort to improve data on the service sector, the first increase of $350,000 and 4 positions provides for expanded coverage of the transportation sector. We will collect more extensive data on the trucking industry or cover additional transportation industries.

The second increase of $600,000 and 11 positions will maintain the accuracy and quality of the new international Harmonized System that contains information on import, export, and domestic production. The new system will have a significantly larger number of codes, and it will require more frequent changes. The additional funding will provide for those recurring changes.

The increases are offset by two program reductions. A decrease of $400,000 will reduce coverage of the Quarterly Financial Report. The other decrease of $1,000,000 and 23 positions will reduce the number of companies and establishments covered in the Standard Statistical Establishment List.

PERIODIC CENSUSES AND PROGRAMS

The 1987 request for the Periodic Censuses and Programs Appropriation represents an increase of $79,955,000 over the 1986 appropriation. The increase includes $71,454,000 for planned cyclical changes in the programs, a net reduction of $4,174,000 for adjustments to base, and $12,675,000 for other program changes. I will provide highlights of the major programs.

ECONOMIC CENSUSES

The budget includes $13,179,000 for the third year of planning and preparation for the 1987 Economic Censuses. The increase of $1,000,000 and 9 positions will expand the Census of Business to include hospitals and additional transportation industries. This proposal represents another important step in improving the statistical coverage of the service sector. These data are available from existing company records and represent a lower reporting burden than the detailed financial data previously collected by regulatory agencies.

CENSUS OF AGRICULTURE

The budget includes $11,556,000 to continue planning and preparations for the 1987 Census of Agriculture. The budget contains a decrease of $2,600,000 and 5 positions that will eliminate the Farm and Ranch Identification Survey. We will use alternative methods to update addresses on the census mail file and remove nonfarm operations.

1990 DECENNIAL CENSUS

Preparations for the 1990 Decennial Census are on course and on schedule. We have completed basic preparatory and organizational work. Through evaluation of the 1980 census, internal analysis, and consultations with people outside the Census Bureau, we have identified areas that need improvement and areas of strength.

We are testing new procedures, equipment, and systems in our test census program and other testing and research efforts. We have completed the Address List Compilation Test and the 1985 Test Censuses in Tampa, Florida, and Jersey City, New Jersey. We are in the midst of 1986 test censuses in Mississippi and Los Angeles as well as the National Content Test, and we are well along in preparations for a test census in North Dakota in 1987. We have also begun preparations for the dress rehearsal in 1988.

The budget includes $78,899,000 for the 1990 Decennial Census. Fiscal year 1987 marks a transition in the Census budget cycle. We will shift primary emphasis from testing to decision making and preparatory work on techniques and methodologies selected for the 1990 census. Specifically, we will complete evaluations of the 1986 test censuses, conduct the 1987 test census, conduct other special purpose tests, submit proposed questionnaire topics to Congress, plan and prepare for the 1988 dress rehearsal and census address list development, and continue work on census geographic Areas.

In 1987 we will be making major decisions for the 1990 Census. These decisions need to be made early enough to allow time for a true dress rehearsal of procedures in 198 The dress rehearsal will help us refine procedures and reduce the inherent uncertainty and risk facing a major logistical and statistical operation that is done only once every 10 years.

We also need to make decisions early so that we can begin preparations for the 1990 Census. Some of these activities include:

- establishment of district and processing office boundaries;
- hiring of regional office support staff for our 1988 rural area address listing;
- procurement of commercial mailing lists for urban areas;
- final determination of tabulation area boundaries;
- procurement of automatic data processing equipment;
- submission of questionnaire topics to Congress;
- final research on actual questionnaire design and question wording;
- testing and procurement of tabulation and publication systems for preparing census data products;
- continued outreach efforts with national and local groups to encourage public cooperation; and
- final research on statistical methods to produce accurate census data. In particular, we will propose criteria for possible adjustment of census data and discuss them with local, state, and Federal data users, including Congress.

SAMPLE REDESIGN

The budget proposes $650,000 for revisions to the statistical samples used for monthly, quarterly, and annual surveys. Updated samples are essential for maintaining the quality of demographic statistics. This increase provides for the start of the planning process required for the timely redesign of major demographic surveys based on results of the 1990 Census.

GEOGRAPHIC SUPPORT AND DATA PROCESSING SYSTEMS

The budget includes $16,115,000 for geographic support activities. We will complete the conversion from a hand-drawn map process to a computer-generated map system.

Our request for continued improvements in data processing capabilities and support of existing equipment and facilities totals $57,187,000. This amount includes an increase of $13,625,000 to provide for automatic data capture equipment for the 1990 census, and replacement of obsolete data entry equipment at the Jeffersonville, Indiana processing facility.

This concludes my prepared statement.

Thank you, Mr. Chairman

CONTRACT SERVICES

Mr. **Smith**. Are you contracting out services you had previously done in-house?

Mr. **Keane**. I would presume that might depend on the time frame that you have in mind. Do you mean within the past year or over the past five?

Mr. **Smith**. For example, what about your planning for the agricultural census.

Mr. **Keane**. Not to my knowledge.

Mr. **Bellomo**. The studies that we are doing in-house right now have to do with OMB Circular A76, which are housekeeping functions, but I don't know of any outside contracting to do major work on the census.

ADVERTISING CONTRACTS

Mr. **Smith**. I understand you are contracting for public relations or advertising? Are you contracting for publicity of services?

Mr. **Keane**. We are exploring the possibility and hope to go with the Advertising Council, which we did in the 1980 census.

Mr. **Smith**. I understand that you are expecting to spend five times as much as you did before to give that service?

Mr. **Bellomo**. The last time the services of the Ad Council were pro bono. We paid nothing to them.

Mr. **Keane**. We don't pay for the time or space, we pay only for the production cost. The so-called creative time, of course——

Mr. **Smith**. I am talking about the overall cost. Has this resulted in higher cost? Is it going to?

Mr. **Keane**. I presume it will be somewhat higher cost, because even to maintain the level of the 1980 campaign, of course, the production services have increased in cost, but relative to the benefit, it is a very small percentage. we estimate that we receive on a free basis approximately $39 million worth of advertising coverage, which is an enormous amount. Having come from the advertising industry, I perhaps have a better perspective on that than some others.

Mr. **Smith**. What do you advertise?

Mr. **Keane**. We advertise for people, if you want to use that term, it is really kind of an outreach publicity campaign, more in the public relations area, but we advertise for people to be aware of the 1990 census, to be aware of the Census Bureau, so that the cooperation will be high, and therefore the quality of the data will be high.

Mr. **Smith**. I have been assured this is correct. You are advertising, and this method of doing it exceeds greatly the cost of direct mail doing the same thing.

Mr. **Keane**. Direct mail is a vastly different medium. It wouldn't have near the reach nor the impact of television, of which a major portion of the 1980 effort was on.

Mr. **Smith**. In the agricultural census you don't care about the 96 percent that you are not going to contact. You want the 4 percent you are going to contact?

Mr. **Keane**. We want to contact everybody. The census is for everybody.

Mr. **Smith**. The agricultural census?

Mr. **Keane**. No, I am talking about just the decennial.

Mr. **Smith**. We are talking about the agricultural census now. You get the list from ASCS of every producer in the country, and go directly to them. Why do you want to advertise to the other 96 percent you don't want to contact?

Mr. **Keane**. We would want to advertise, reach those who may not have a problem on the possibility and the hope that they can reach the ones who are the problem, and if it is the 4 percent you speak of, why, they are important to us. In other words, if you are aware of the census of agriculture, and I am not, or if I might be reluctant to cooperate but you know because you have been influenced by that campaign, you might come to me and encourage my cooperation, and that would be a good thing to do and an important thing to do.

Mr. **Smith**. That is a very, very expensive way of doing it.

Mr. **Keane**. Really we are just talking with the Advertising Council now, and the campaign isn't underway. You may know something that I don't know about it. I just spoke last night, and I am not aware of the campaign in any detail. We are in the process of just starting the formulation of it.

1982 CENSUS OF AGRICULTURE

Mr. **Smith**. I can see on a general census how you would get the general population to talk to out there, but I wonder on these specialized censuses like the agriculture census about this kind of approach. The last agricultural census was taken in what year?

Mr. **Keane**. It is for 1982, but it was taken in 1983.

Mr. **Smith**. When is the information distributed?

Mr. **Keane**. It began September of 1983, and of course it comes out over a period of time.

Mr. **Smith**. Has it all been distributed now?

Mr. **Keane**. It is essentially complete. Yes, sir, it is.

Mr. **Smith**. You took it in 1983 or you took it in 1982?

Mr. **Keane**. We took it in 1983. We have to wait for the completion of the year, because we want information about the year.

Mr. **Smith**. So then you took it in the spring of 1983. Then when was the information distributed?

Mr. **Keane**. Beginning in September of 1983, within months of the start of the effort.

Mr. **Smith**. It was done well in this time. I mean, in previous censuses it has been about two years before you get the information out. By that time it is not of any value. Did you actually get it out this time?

Mr. **Keane**. Yes.

SEQUESTRATION

Mr. **Smith**. How about the sequestration, how does that affect your operation?

Mr. **Keane**. If we are to follow the President's budget, why, that should avoid sequestration in 1987. And if we do that, that will help us against major sequestration in 1988.

Bureau of the Census
Periodic Censuses and Programs

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
Consulting services	...	....	...
Management and professional services	$440	$440	$440
Special studies and analyses	...	...	...
Management and support services for research and development	...	...	...
Advisory committee expenses	60	60	60
Subtotal	500	500	500
Amount withheld from obligation pursuant to P.L. 99-190	...	-50	...
Total	500	450	500

Management services and professional services are used by censuses and programs to develop solutions for new problems or program areas that require outside expertise. Some examples include research and development for the 1990 Decennial Census FOSDIC system and facilities management for a census test site. Support is included for the acquisition process for decennial census equipment. In the geographic program, the service will support the acquisition of a geographic update and map production system. In the data processing equipment program, services will support advanced ADP training and problem resolution for software.

Bureau of the Census

AVERAGE GRADE AND SALARY

	FY 1985	FY 1986	FY 1987
Average ES salary	$67,239	$67,239	$67,239
Average GS grade	8.12	8.12	8.06
Average GS salary	21,916	23,531	20,906

Mr. **Smith**. But how did you handle the current one? Are you going to have to RIF anybody?

Mr. **Keane**. We have no plans to RIF nor furlough. We planned prudently early on, and that goes for 1986 too, and looked at those programs that could be deferred. There is some saving on coverage. Some reports aren't as frequent as they were. Of course, there is always the scheduled attrition throughout this that we have taken advantage of. We monitor it closely. We are looking for any kind of warning signs that we should move on.

Mr. **Smith**. What about reprogrammings?

Mr. **Keane**. Major reprogrammings? No.

1990 DECENNIAL CENSUS

Mr. **Smith**. We have talked on this committee for years, about planning for the next decennial census. Where are you in the planning now?

Mr. **Keane**. We are on schedule and on target. We have a program that started with test censuses in 1984 and continues. For instance, this year there is one in Meridian, Mississippi, one in east Los Angeles County. Both of them broke last Sunday. The census is there. We have one planned for North Dakota, and on a special basis others in 1987. There will be a national content test this year, all moving toward the big and final test, which is the 1988 dress rehearsal.

In other words, as much as we can simulate what it might be in 1990. There is a procurement plan. We are waiting as long as prudently possible before we commit ourselves on equipment especially, because of the fast-paced improvements in technology, and there is an overall management information system that goes down to a five-tier level. All that is a very detailed blueprint of the steps that we have to go through with the assigned responsibilities for those steps and targeted on a rather short-term time basis.

Overall, we have a strategic planning system that is a formal one. Perhaps not many other government agencies have one. That is the overall umbrella. Then we would have the decennial program within that and a number of checks and balances built within that. Formal plans. By that I mean they are written and in presentational form which we would be happy to show you and other members of your committee.

Mr. **Smith**. In the past, and I assume it will be again, we always get complaints about missing people and not getting a complete census, partly because people won't admit that they live there, I think the problem is greater in core areas of cities. Is that where the problems are greatest?

Mr. **Keane**. They are some of our biggest challenges, depending on the group. Certainly young black males in the core cities, especially the large ones.

USE OF MAILMEN TO CONDUCT THE CENSUS

Mr. **Smith**. The idea has been around here—Mr. Early has advanced it a number of times—that there is one person who knows more about who lives where than anybody else. That is the mailman. We have advanced the idea a time or two—and I don't think it has ever been taken as seriously as it should have been—of the possibility of hiring mailmen in their off hours or incorporating somehow their knowledge into this to get a more accurate census that way. Have you looked at that?

Mr. KEANE. I met with the Postmaster General, the former one who lost his job several days later. I don't think there is any connection. I hope not. This was several months ago with our respective staffs. We explored a number of areas, and certainly one of them was cooperation of an expanded nature with the Postal Service. They have been traditionally involved with us, of course. They perform such an important role, especially in updating our address lists and checking those.

We even looked to the extent of possibly using—it is too sensitive an issue to use postal employees themselves in other major ways than just delivering the census. But we did look at the possibility of using a pool which the Postal Service has of qualified people, which they haven't hired, which is I think——

Mr. SMITH. What is wrong with using a mailman on a willing basis, if he wants to in his off-duty hours, to do the census on his route?

Mr. KEANE. As far as I know, there is no problem with that. I will ask the Deputy Director.

Mr. KINCANNON. I am not sure that there is an operational problem. I believe there is currently a legal barrier to hiring them, but we can address that.

Mr. SMITH. Why? What is the legal barrier?

Mr. KINCANNON. I think we are not permitted to hire other Federal employees in their off-duty hours, just like we can't hire retired Federal employees, which we believe to be another good source of talent for the taking of census. It is not clear, though, sir, either that in areas most difficult for us that the postman necessarily has better knowledge of who is residing in a given household, particularly in inner city areas with large buildings, the distribution of mail is usually a central point. They may have an impression about the number of people in the building but not in which unit they live.

Mr. SMITH. Don't they have boxes?

Mr. KINCANNON. They have boxes, yes, sir.

Mr. SMITH. I have been amazed as I watch them put up the mail. They just glance and they know what box it goes in. He knows what boxes have been getting mail for three names. If they tell him there are only two there, why, he would be the fellow that could answer the question where the third one is; isn't he?

Mr. KINCANNON. That is correct, and we do use the Postal Service very intensively to make sure we have all the housing units included in our list for mail coverage. The postman would not know about people who don't get mail at that address, particularly teenagers and other young people.

Mr. SMITH. No one else would know?

Mr. KEANE. Nor would anybody else. We trust the household respondent.

Mr. SMITH. It wouldn't be a 100 percent answer, but it would help with regard to those that are not admitting they live there.

Mr. **Keane**. Suppose we look into it and give you a little more extensive answer on that.

Mr. **Smith**. I think if there should be a change in the law, we ought to look at that.

Mr. **Keane**. All right, sir.

Mr. **Smith**. I think that with retired employees, we are trying to get quality work and not get hung up on something about somebody getting a little extra money that somebody else would like to have. Let us have the citations in the law, whatever they are, that we are looking at here.

Mr. **Keane**. Yes, sir.

[The information follows:]

Both Title 13, U.S.C., Census, Section 23(b) and Title 39, U.S.C., Postal Service, Section 1001 appear to permit postal employees to perform decennial census field work without regard to the Dual Compensation Act. The Census Bureau is not aware at this time of any legal prohibition against using postal carriers.

Both the Census Bureau and the U.S. Postal Service will examine the merits of hiring postal carriers. This issue is one of 11 points included in an agreement, signed in December 1985 by the Director and the Postmaster General, establishing a joint task force for the 1990 census. The issue appeared as an agenda item for the first meeting. At the meeting, attendees raised both operational and perceptual questions that need to be studied. Both agencies will assess the risks, benefits, and costs.

With regard to hiring retired employees, there are legal restrictions. Title 5, U.S.C., Government Organization and Employees, Sections 8344 and 5532, respectively, require reductions in retirement benefits for Civil Service and military retirees if they are reemployed by the Federal government. We are developing a package of legislative proposals to enable us to conduct the most effective and efficient decennial census. One component of the package may be legislation that allows retirees to work as temporary census workers without this reduction in their retirement pay.

Mr. **Smith**. I have a number of questions that I want to ask, but I think we will do it for the record.

Mr. **Keane**. Thank you, sir.

[Questions for the record follow:]

82A-1

Questions for the Record by Congressman Smith

Gramm-Rudman Sequestration

QUESTION:

How are you managing to sustain the $8,428,000 reduction as a result of the Gramm-Rudman sequestration? Will this cause any RIFs or furloughs in your agency?

ANSWER:

We have applied the 4.3% cut to all Bureau line items. No single major activity has been targeted for elimination or major reduction. Savings are expected to accrue through personnel attrition, deferred activities, and increased emphasis on financial management. At this time, no RIFS or furloughs are expected for FY 1986.

QUESTION:

Are you planning to submit a reprogramming in order to minimize the effects on your program and personnel?

ANSWER:

We do not see a need for reprogramming at this time in order to minimize the effects.

QUESTION:

Could you sustain a similar reduction in personnel in 1987 if the sequestration occurs again at about the same magnitude?

ANSWER:

No. A similar sequestration in 1987 would likely result in RIF and furlough. Our FY 1987 budget request contains the personnel and funding levels needed to carry out census programs.

Quarterly Financial Report Data on Small Manufactures

QUESTION:

What is the status of the $400,000 that was provided for the 15 positions to continue to develop data on small manufactures for the Quarterly Financial Report?

ANSWER:

The $400,000 was used for development and partial implementation of program enhancements to yield greater precision in estimates by industry, improvement of editing and estimation procedures, and more complete publication of data by asset size.

Survey of the Communications Sector

QUESTION:

What is the status of the $300,000 that was to be found within existing resources to conduct a general economic survey of the communications sector?

ANSWER:

The Census Bureau has developed questionnaires and selected a sample which will produce basic economic statistics for the communications industry. The survey will collect about 20 revenue and expense data items for 1984 and 1985 and will include telephone and telegraph communication, radio and television broadcasting, cable television and telecommunication. We have consulted with other government agencies, trade associations, and individual firms throughout the development of the survey. The Office of Management and Budget is now in the process of reviewing the survey. We expect to publish the results of this survey in December 1986.

Measurement of Non-Cash Benefits

QUESTION:

How have you complied with the directives involving the Bureau's research and evaluation efforts of non-cash benefits in fiscal year 1986 conference report?

ANSWER:

The Bureau is in the process of preparing two publications on the conference on the measurement of non-cash benefits that was held in December, 1985. The first publication is expected to be ready in a few months and will contain the four papers commissioned for the conference as well as the comments of discussants. The second publication, which will be out later this year, will contain transcripts of the discussions held in the various working group sessions and during the plenary sessions. A summary of the Census Bureau's plans for research in this area will be given in testimony before the House Subcommittee on Census and Population on April 17, 1986 Data on non-cash benefits continue to be gathered on an experimental basis. These data are not included in official poverty estimates which are based solely on money income.

Expansion of the Current Economic Statistics Activity

QUESTION:

The expansion of the current economic statistics activity would expand the coverage of the service and the annual survey and provide for the improvement, maintenance and extension of the expanded harmonized system. What is driving this request for increased resources?

ANSWER:

The service sector is the fastest growing major component of the economy and has the weakest statistics to measure changes and impact. A 1982 budget reduction further weakened a minimum coverage monthly services survey that converted it to annual coverage. In FY 1984, Congress recognized this condition and instructed the Census Bureau to improve and expand its coverage of the growing service sector. The driving force has been led by the Coalition of Service Industries, an association of major service companies, along with widespread Congressional interest in minimum data coverage of all service industries. Major government agency data users such as the Bureau of Economic Analysis also require the data as a component of the National Income and Product account. One of the Department's major goals is to improve quality and timeliness of its statistics, with emphasis on improving statistics on the service sector.

In addition, Census reviewed the changing data programs of regulatory agencies to identify major data gaps that were developing due to deregulation reducing sources of statistical information that also were needed by economic data users.

With regard to the Harmonized System, legislation included in the Trade Act of 1974 directed the United States to actively participate in the work of the Customs Cooperation Council in its efforts to develop an international system for use in classifying U.S. imports and exports. The President requested the U.S. International Trade Commission to investigate and report on the effect of U.S. adoption of the Harmonized System. The international timetable calls for implementation in January 1987. We are working on a timely conversion of the existing import and export statistical systems.

There is a critical need to improve data for addressing trade-related economic issues. More comparable output and trade data will partly meet this need because the data will be more useful for evaluating the effect of increasing imports on domestic industry and addressing an increasing list of trade-related economic issues.

This request will provide for the continued revision, improvement, maintenance, and extension of a greatly expanded classification system. The present 11,000 output codes and 11,000 import codes will increase by more than 20 percent. The revised export classification codes will almost double, increasing from the present 5,000 export codes to 8,000 revised codes. In addition, the expanded and more complex classification systems also will be more volatile. The import system changes continuously during each year because of continuing international trade negotiations and congressional tariff changes. As a result, to maintain comparability with the import system, revisions to the export system will be required several times a year instead of once as presently done.

QUESTION:

What is the basis for the increased resource request rather than reprioritizing your activities and deleting those of the lower priority?

ANSWER:

Since the amount of service data now available does not adequately reflect the level of economic activity, and since the census reflects the entire universe, it is desirable to include all service industries. As the 1982 budget reductions seriously curtailed the current sample survey program, no additional reductions in this area are being considered. It should be noted that due to design, sampling, and start-up costs for adding a new industry, a number of existing industries would have to be dropped to add one new industry.

All current programs for collecting, compiling, and publishing foreign trade statistics are essential for monitoring the nation's merchandise trade balance and cannot be deleted.

In order to introduce and maintain the Harmonized System as the classification basis for the U.S. trade statistics, major computer programming, processing changes, changes in the publication program and educational work with the reporting public will be necessary in 1987 to maintain the current levels of utility and quality of the foreign trade statistics program.

QUESTION:

What are the individual dollar components of each of these activities?

ANSWER:

The 1987 request for the service annual survey is $350,000 and the harmonized system increase is $600,000.

QUESTION:

What is the base level in your 1987 request for the service annual survey and the harmonized system activity?

ANSWER:

The base level for the service annual survey in the 1987 request is $1,945,000 and the harmonized system base is $250,000.

Quarterly Financial Report Reduction

QUESTION:

You are requesting a decrease for the current economic statistics activity including a reduction related to the Quarterly Financial Report. Do you feel that any industry components have been interested in the additional data that you have provided? Has this information been used by the FTC in its analysis?

ANSWER:

The specific reduction in QFR activity is curtailment of improvements in the program's small business data base. These improvements have been developed recently and have not yet been reflected in published data. Therefore, users, such as small business trade associations, congressional committees, and Federal agencies that supported these improvements, have not had the opportunity to review or apply these enhanced small business data. We do not know whether this information has been used by FTC in any analysis they may produce.

Standard Statistical Establishment List

QUESTION:

What is the reduction for the annual survey used to update the Standard and Statistical Establishment List related to? What are the levels of resources associated with this reduction? Who has benefited from this information in the past?

ANSWER:

The $1 million reduction represents approximately 20% of the FY 1986 level.

We will reduce the number of companies covered by the Company Organization Survey. This annual survey is used to update the internal structure of multiestablishment companies in the SSEL. Without this update, it will be necessary for us to conduct a precanvass of these companies during FY 1987 in order to develop the mailing lists for the 1987 Economic Censuses.

The Census Bureau's economic data collection activities rely on the SSEL. For example, we use the SSEL as the universe list for our economic census programs, as a sampling universe for our monthly, quarterly, and annual current surveys to include the Annual Survey of Manufactures and the retail and wholesale trade surveys, and as the foundation for our County Business Patterns (CBP) program. The CBP is the only source of 4-digit industry data on number of establishments, payroll, and employment for all counties in the United States. Among the more extensive users of these CBP data are market research firms, marketing departments of large and small corporations, universities, and individuals looking for areas of investment or industrial growth.

Periodic Censuses Adjustments to Base

QUESTION:

You are requesting an increase of $84,496,000 for your periodic census and programs account above the 1986 adjusted appropriation level. Of this amount, $71,450,000 is related to planned cyclical changes in periodic censuses for programs that have been approved in prior years appropriations of a multiple year nature. Please detail for the record how these adjustments to the base for this $71,000,000 occur by program.

ANSWER:

The $71 million increase does not represent only adjustments to the base. The increase just represents the net dollar arithmetic increase from 1986 appropriation to 1987 base. The 1987 estimate is explained in the program narrative justification for each subactivity.

The detail of the planned cyclical changes by program follows:

	FY 1986 Approp	Adj to Base	Cyclical Change	FY 1987 Base
Economic Censuses	$10,640,000	-$251,000	+$1,790,000	$12,179,000
Census of government	941,000	-48,000	+4,459,000	5,352,000
Census of agriculture	6,322,000	-231,000	+8,065,000	14,156,000
Intercensal demo. est.	2,554,000	+63,000	...	2,617,000
Decennial Census	51,245,000	-2,802,000	+30,456,000	78,899,000
Geographic support	18,622,000	-554,000	-1,953,000	16,115,000
Data processing systems	15,276,000	-351,000	+28,637,000	43,562,000
Total	$105,600,000	-$4,174,000	+$71,454,000	$172,880,000

Management Savings

QUESTION:

You indicate that you have achieved management savings of $3,686,000 in 1987. Would you please detail for the record how you plan to achieve these and how you have achieved any management savings in 1986?

ANSWER:

The management savings in 1986 and 1987 will be achieved by a reduction in administrative costs. This will include reducing the cost of positions in grades 11-15 and improved overall position management.

Productivity Reviews

QUESTION:

What are your productivity reviews savings of $2,950,000 related to in fiscal year 1987?

ANSWER:

Areas to be reviewed include: data transcription services, library services warehouse and stock handling, motor pool vehicle maintenance, mail services and automatic data processing services.

QUESTION:

Do you have any tangible results of activity reviews in fiscal year 1986 that you can take advantage of?

ANSWER:

No, we do not have any fiscal year 1986 results at this time. The areas under review for FY 1986, but not complete, are warehouse and stock handling, equipment, transportation, library, mail and supply services.

Census of Business Increase and Farm and Ranch Decrease

QUESTION:

You are requesting an increase of $1,000,000 for the Census of Business to expand the Census of Business to include hospitals and selected transportation services. Why can't you carry out these activities within the existing $6,053,000 in the 1987 base? You are requesting a decrease of $2,600,000 related to data collection which will eliminate the farm and ranch identification survey. Why are you eliminating these two? Of what use was the data in the years that you have conducted this survey? Who utilized the data?

ANSWER:

The 1987 Census of Business base budget figure of $6,053,000 is for planning and preparation of the census in the same scope and content as for 1982. Money to expand coverage in the growing service sector is not included in this base. The $1,000,000 will enable us to increase the coverage of the 1987 Economic Census by approximately 180,000 additional establishments representing nearly 5,000,000 employees.

The Farm and Ranch Identification Survey was eliminated after it was reviewed under the requirements of the Paperwork Reduction Act. The survey was conducted prior to the 1978 and 1982 censuses to assist in preparing the mailing list for the Census of Agriculture report forms. Since there is no up-to-date list of all farms, prior to each census we update the previous census list with lists from the Internal Revenue Service, Department of Agriculture, and other public and private sources. These lists contain names of many non-farm operators such as landlords, retired farmers, and places that do not meet the minimum sales definition of a farm. The survey was used to screen a portion of the names to help eliminate the non-farm operators from the mailing list for the census. Through this survey in 1982, we eliminated about 1.7 million names with a short screening form, thereby relieving those individuals from receiving and completing the longer report form for the Census of Agriculture. However, we will use modeling to screen the sources for the census mailing list.

Sample Redesign

QUESTION:

You are requesting an additional $650,000 for sample redesign related to the quality of data and cost effectiveness of the collection, tabulation, and dissemination process. Who knows better about sample design than the Census Bureau and why do you need this additional money to improve on something about which that you have already perfected the state of the art?

ANSWER:

Every ten years, following the decennial census, the Bureau considers redesign of its sample surveys to improve their efficiency, accuracy, and usefulness. Over a ten-year period, sample frames get outdated, population changes skew the sample from an optimum design, and new methodologies are developed. The redesign is necessary to keep the Bureau samples current. The Census Bureau did a great deal of work as part of the previous sample redesign, which we estimated more than paid for itself in cost savings and equivalent gains. However, there were several highly promising areas in which no work was done, and other areas in which there was insufficient time before redesign implementation to complete the work. We believe work in these areas can result in improvements in quality and better cost effectiveness.

Data Processing Systems

QUESTION:

You are requestin an additional $13,625,000 for data processing systems above your 1987 base le l, which is in fact an additional $28,000,000 above the 1986 currently av lable amount for this purpose. What do you plan to do with $42,000,000 of th 1986 currently available level for data processing systems?

ANSWER:

Most of the incr e is decennial related. However, the increase also includes such major items s the acquisition of a large-scale computer mainframe and the replacement of ex ting data entry equipment.

o Approximately 27 million (or 65 percent) of the overall increase is directly decennial rel ed--encompassing two major programs: (1) the geographic support syste which is well underway to providing for the storage, maintenance, and updating c the Nation's geography into machine readable form; and (2) the decennial ata capture effort which, through the investigation, development, and incorporat on of state-of-the-art technology, is designed to support the most effective data collection methodology for the 1990 Decennial Census.

This latter p gram also reflects the shift of almost $10 million from FY 1989 ahead o FY 1987 in order to accelerate the acquisition of equipment and thereby e ure that the manufacturers will have sufficient time to actually build and del er the machines when needed.

o The acquisiti of the computer mainframe is in direct response to fulfilling growing work ad demands. This system, along with substantial mass storage increases, wi give the Census Bureau the ability to provide the additional capacity esse ial to meeting our survey and census production requirements and allows th Bureau to keep pace with the latest technological advances in both computer ardware and software.

o The data entr equipment replaces hardware systems that are deficient with respect overall capacity, technical capability, and vendor support. This request so reflects the shift forward from FY 1989 of almost $4 million as a result o these critical operational deficiencies.

QUESTION:

Discuss the $250 00 for site preparation. What site are you talking about?

ANSWER:

The site refers the Census Bureau's central computer facility located within Federal Office B lding #3 in Suitland, Maryland. The central computer site occupies approxi tely 70,000 sq. ft. of floor space and contains 3 major computer systems lus additional hardware components, e.g. on-line magnetic tape subsystems, irect access disk storage devices, high speed laser printers, etc., required t accomplish the Census Bureau's data processing workload. The site preparation efers to the "conditioning" of space including electrical work, air condit oning, raised flooring, and plumbing prior to installing hardware compone s.

QUESTION:

You are requesting $5,203,000 of this total for a "bridge" computer system. Why is this necessary?

ANSWER:

The "Bridge" computer system (a Sperry 1100/84) was acquired in FY 1983 specifically to provide the additional processing capacity essential to meeting the Census Bureau's rapidly expanding work load requirements. At present, this system accounts for approximately 40 percent of our overall computer capacity. The funding request of $5,203,000 relates entirely to the continuation of the necessary lease-to-ownership payments and maintenance expenses for this hardware, software, and associated support.

QUESTION:

What is the field automation component of $41,000 comprised of and why is it necessary?

ANSWER:

The funding request of $341,000 represents the continuation of maintenance and support expenses for equipment (microcomputers, data entry hardware, line printers, etc.) recently acquired for the Census Bureau's 12 regional offices. This equipment is dedicated to the automation of many of the labor-intensive, administrative operations currently performed in these offices. As such these systems will increase the efficiency of general office functions such as budget, payroll, and personnel administration.

QUESTION:

$16,832,000 of the total is related to a geographic support system. Why is this necessary? Can you not forego this $16,832,000 expenditure?

ANSWER:

No, we cannot forego or delay this expenditure. These funds are necessary for geographic support services to avoid serious problems experienced in the past decennial census. Geographic support, consisting of address lists which are geographically coded, enumerator and thematic maps, and computer-based files, must be accurate and timely. Accurate and timely geographically referenced information is vital to the Census Bureau's mission in Congressional apportionment and redistricting, census-based formula grant programs, and in providing economic and demographic information to the private and governmental sectors. Production of maps, creation of computer-based geographic reference files, and control of processing operations depend on a series of complex and labor-intensive activities. These activities include acquiring and editing maps; incorporating the latest reference material to show address ranges, changes in boundaries, and annexations; producing maps for enumerator use; keying information into computer-readable form so that questionnaires can be addressed, computer-based files prepared, location codes assigned, and enumerators given specific and nonoverlapping areas to canvass; and finally, tabulating information by geographic area.

The high cost of processing the enormous volume of information by traditional methods combined with the tedious nature of the job results in poor quality. Poor map quality, besides causing enumerator delay in orienting themselves to an unfamiliar area, also can be translated into misapportionment, misallocation of formula grant funds, and ultimately, a loss of integrity in the entire process.

QUESTION:

You are requesting $3,531,000 of the total for data processing systems relating to the decennial data capture, which will provide for the continued investigation, development and selection of equipment technology. Would you please discuss in layman's terms what $3,531,000 would do and why it is necessary to the conduct of the census.

ANSWER:

The primary purpose of automated technology is to capture the data in a timely, reliable manner while reducing labor-intensive, time consuming manual operations. An example of this is to reduce multi-step manual tasks such as forms printing, address label attachment, and mail package creation to a one step operation such as those used by bulk mailers like Reader's Digest, Publisher's Clearing House, etc.

DDC equipment is necessary to develop an integrated data processing system that will: 1) manage the data collection effort; 2) perform the data capture operations; and 3) tabulate the results of the data captured for the production of user tapes and publication tables. This system must also produce up-to-date progress/status information for all segments of the decennial program in order to provide management with the information necessary to conduct and finish the census on time within budget.

The Census Bureau will complete automation plans during FY 1987, much of the equipment needs will have been determined beforehand; namely, check-in sorter hardware and FOSDIC (film optical scanning) research and development components. This equipment requires lengthy lead times. Other equipment planned for this time frame includes data entry systems for the prelist operation and hardware related to testing the office automation concept.

Due to lead times for development, construction, fabrication, and installation, the data capture equipment will be phased in physically starting in calendar 1988. However, vendor research and development must begin in FY 1986 if the equipment is to be ready by 1988.

QUESTION:

What is $6,570,000 for on-line data storage related to? Why is it necessary? Can you not accomplish this within existing resources?

ANSWER:

The on-line disk storage will be used to augment that disk storage currently in operation on the Census Bureau's three large scale computers. Our current disk storage capacity is only one-half the amount needed. In addition, disk storage requirements are continuing to increase, geograhic file building requirements are more than double that currently in use, and additional disk storage is required for the 1987 Agriculture/Economic and 1990 Decennial Censuses. Any further disk storage capacity shortage will drastically increase system overhead operations, and seriously reduce throughput on the computer system.

81A-11

QUESTION:

You have designated $7,300,000 for computer replacement. How many computer replacements will there be? Is this the only cost associated with these replacements? Why do you need to replace the computer system that you have? How much money has this Committee provided for in replacement costs since 1981? You are requesting an additional $530,000 for decennial data capture above the base level. How will this augment the increase you have already requested within the base attributable to normal cyclical requests?

ANSWER:

This $7,300,000 funding is to replace an aging Sperry 1100/84 mainframe that was acquired in 1979 (and has become work load saturated) with two minicomputer systems and a more advanced system. Studies conducted both in-house and by a private consultant have projected that our work load will increase at an annual rate of 16 percent through the 1990s. Without acquisition of these resources, we would not be able to process our growing work load nor have sufficient capacity to process the anticipated 1990 Decennial Census edit and tabulation work requirements. In addition, funding has also been requested for the site preparation required to install these computer systems. The Committee has not provided any money for replacement costs. This is the first year funds have been requested.

An additional $9,630,000 for decennial data capture is being requested above the base level. This request reflects a shift from FY 1989 ahead to FY 1987 in order to accelerate the acquisition of equipment and thereby ensure that the manufacturers will have sufficient time to actually build and deliver the machines when needed.

QUESTION:

What is the data entry replacement request of $3,995,000 related to in terms of providing better census surveys and accuracy?

ANSWER:

The data entry replacement request relates to the system per system replacement of data transciption equipment acquired by the Bureau of the Census in 1979. In 1983 these data entry systems were upgraded as an interim plan to meet increasing data entry requirements. This upgrade did not, however, provide reliable equipment to the Bureau for the long term. This replacement initiative is to provide efficient, up-to-date and fully reliable data transcription equipment. The primary programs supported by this equipment are current surveys data associated with economic and demographic censuses and surveys and internal administrative data. Specifically, it is the speed and accuracy of the data transcription processing of the Bureau programs that will benefit through this equipment replacement.

Questions for the Record by Congressman Carr

Census of Horticulture

QUESTION:

Why did you decide to discontinue funding for the Horticulture Census Report?

ANSWER:

We conducted Censuses of Horticulture in 1890, 1930, 1950, 1959, 1969, and 1979. We excluded the census from the FY 86 request as a result of the FY 1986 deficit reduction program. Consequently it was deleted from the outyears also. Horticulture was eliminated from our FY 86 request because it is the only segment of the 1987 Census of Agriculture program not specifically required by law in Title 13. Our only alternatives were to eliminate the Agriculture Censuses for Puerto Rico, Guam, and the Virgin Islands, or the 1987 Irrigation Census, or to dramatically reduce the scope of the census for the 50 states, all of which are required by law and would effect more programs than eliminating the horticulture Census.

QUESTION:

This Subcommittee funded $100,000 for the Horticulture Report in FY 86 Appropriations bill. What happened to those funds? If they have not been used, where will the money be used?

ANSWER:

We began preparing the plans for the Horticulture census, including identifying public and private groups to help determine content, reviewing mail list sources, and analyzing the methodology used in the 1979 census.

QUESTION:

Have you done an analysis of any private sector participation in a Horticulture Report? How will the floriculture community get future information on the horticulture industry?

ANSWER:

We have discussed in general the possibility of the industry funding the census; however, since Federal, State, and local governments are also users of the data, the industry believes general use data of this nature should be funded and collected by the Federal government. The horticulture census provides detailed county level data for both the floriculture and nursery industries. Alternative sources for floriculture data include the 5-year agriculture census which provides a count of the number of horticultural establishments, the value of sales, and selected expenditure data. Also, the U.S. Department of Agriculture annual floriculture survey provides state level data about the floriculture industry, but excludes nursery establishments.

Friday, March 21, 1986.

ECONOMIC AND STATISTICAL ANALYSIS

WITNESSES

D. BRUCE MERRIFIELD, ACTING UNDER SECRETARY FOR ECONOMIC AFFAIRS

FREDERICK T. KNICKERBOCKER, EXECUTIVE DIRECTOR

ALLAN H. YOUNG, DIRECTOR, BUREAU OF ECONOMIC ANALYSIS

JOSEPH F. CAPONIO, DIRECTOR, NATIONAL TECHNICAL INFORMATION SERVICE

B. JEROME JACKSON, ACTING DIRECTOR, OFFICE OF ADMINISTRATION

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET, AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. Smith. Next, we have the Economic and Statistical Analysis. Here to testify is Acting Under Secretary Bruce Merrifield. The budget request is $31,500,000.

[The justifications follow:]

60-134 O—86——10

DEPARTMENT OF COMMERCE
ECONOMIC AND STATISTICAL ANALYSIS

Budget Estimates, Fiscal Year 1987
Congressional Submission

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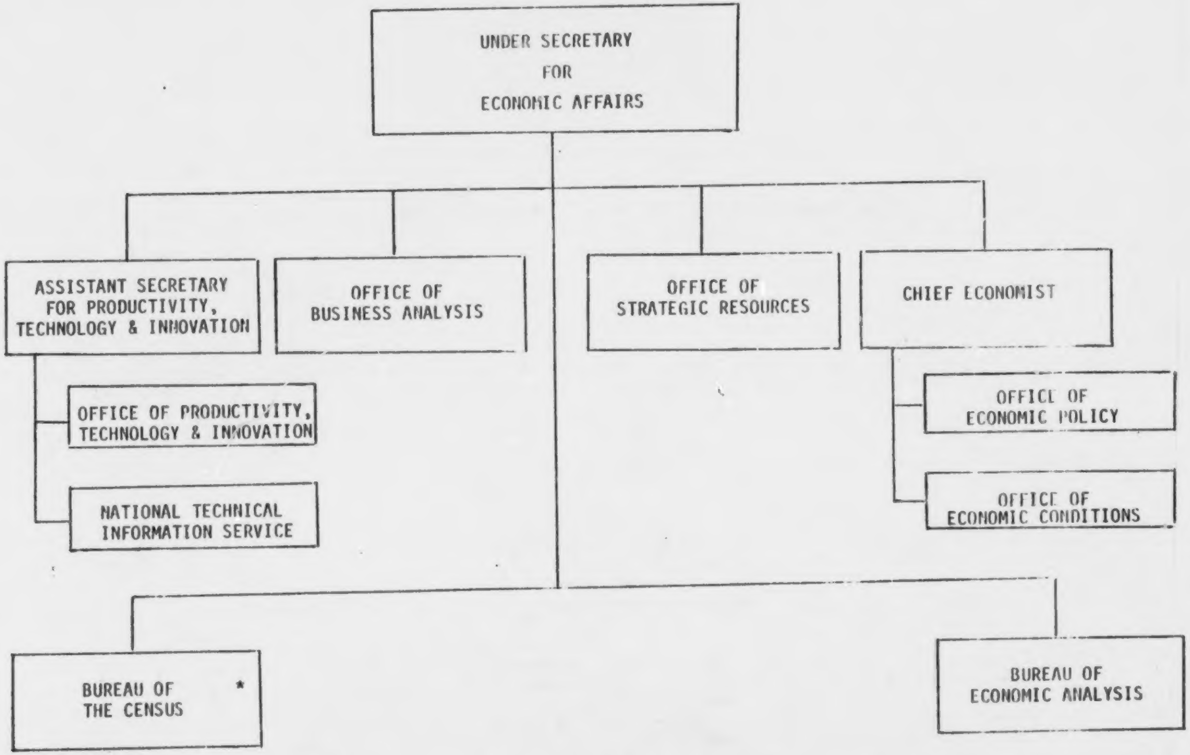
February 1986

U.S. DEPARTMENT OF COMMERCE

ECONOMIC AND STATISTICAL ANALYSIS


UNDER SECRETARY FOR ECONOMIC AFFAIRS
ASSISTANT SECRETARY FOR PRODUCTIVITY, TECHNOLOGY & INNOVATION
OFFICE OF BUSINESS ANALYSIS
OFFICE OF STRATEGIC RESOURCES
CHIEF ECONOMIST
OFFICE OF PRODUCTIVITY, TECHNOLOGY & INNOVATION
NATIONAL TECHNICAL INFORMATION SERVICE
OFFICE OF ECONOMIC POLICY
OFFICE OF ECONOMIC CONDITIONS
BUREAU OF THE CENSUS *
BUREAU OF ECONOMIC ANALYSIS

*The Bureau of the Census reports to the Under Secretary but is funded through separate appropriations.

ESA-1

General Statement

The Economic and Statistical Analysis (ESA) account consists of the Economic Analysis, Strategic Resource, and the Business Analysis programs which are under the direction of the Under Secretary for Economic Affairs; the Economic Policy and Economic Conditions programs which are under the direction of the Chief Economist for the Department of Commerce; and the Productivity, Technology, and Innovation, and the National Technical Information Service programs which are under the direction of the Assistant Secretary for Productivity, Technology, and Innovation. The Under Secretary for Economic Affairs furnishes policy guidance and has overall responsibility for all ESA programs.

A comparison of the FY 1986 appropriation and the FY 1987 estimate is shown below.

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc.(+) or Dec.(-)		Perm. Emp. 12/31
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Salaries and expenses.	618	$30,500	567	$31,005	-51	+$505	525

The FY 1987 budget request for the ESA account is 567 positions and $31,005,000. This represents a net decrease of 51 positions and a net increase of $505,000 from the FY 1986 appropriation of 618 positions and $30,500,000 currently available. The net change consists of the following changes:

	Perm. Pos.	Amount
a) Adjustments to base and built-in changes.	...	+$448
b) A program increase to reimburse the Internal Revenue Service (IRS) for improvements in the annual tabulations of corporate tax return data	...	+750
c) A program decrease which provides for the elimination of all Productivity, technology, and innovation programs	-51	-693
Net change.	-51	+505

ECONOMIC ANALYSIS

The goal of this activity is to provide a clear picture of the U.S. economy through the preparation, development, and interpretation of the national income and product accounts, summarized by the gross national product (GNP); the wealth accounts, which show the business and other components of national wealth; the input-output accounts, which trace the interrelationships among industrial markets; personal income and related economic series by geographic area; the U.S. balance of payments accounts and associated foreign investment accounts; and measures relating to environmental change within the framework of the national economic accounts. The work on the national economic accounts is supplemented by the preparation and analysis of other measures of business activity, including various tools for forecasting economic developments, such as surveys of investment outlays and plans of U.S. business, econometric models of the U.S. economy, and a system of leading, coincident, and lagging economic indicators. The data and analyses prepared by this activity are disseminated mainly through its monthly publications, the Survey of Current Business, including periodic supplements to the Survey, and Business Conditions Digest.

The measures and analyses produced are used in the formulation and execution of fiscal, financial, international, and other policies related to the major economic goals of the Nation. Business plans its production, price, and investment programs with the aid of the information provided. This information is essential also for economic decisionmaking by State and local governments, labor, other economic groups, and by the growing number of individuals who feel a need for a better orientation in an economic world that is becoming increasingly complex. Universities and research organizations rely in their teaching and research programs on the information provided.

The FY 1987 budget request would provide funds for the Bureau of Economic Analysis (BEA) to reimburse the IRS for improvements in the annual tabulations of corporate tax return data that are required for BEA's preparation of the GNP measures. It would provide financing to restore IRS cuts in the: (1) size of the IRS sample used to prepare its tabulations, (2) IRS statistical editing, and (3) preparation of preliminary tabulations.

POLICY SUPPORT

The goal of this activity is to advise the Secretary, Under Secretary, and other Government officials in interpreting the state of the economy, and on matters relating to economic policy. This activity's responsibilities include: (1) providing direct support for the Secretary's participation in the Economic and Domestic Policy Councils, and in similar Administration economic policy forums; (2) preparing speeches, reports, and articles on a wide range of economic matters; (3) advising the Under Secretary on the economic impact of proposed legislation and proposed Departmental and other Federal regulations; and (4) analyzing the cross-industry effects of macroeconomic developments and providing analyses of basic microeconomic problems relevant to current policy issues.

PRODUCTIVITY, TECHNOLOGY, AND INNOVATION

The goal of this activity is to stimulate U.S. private sector productivity, international competitiveness, economic security, and growth. This activity stimulates private sector cooperative research and development, facilitates commercialization of innovations, supports private sector productivity improvement efforts, stimulates binational technology joint ventures, and contributes to U.S. trade objectives through voluntary metric conversion.

This activity's responsibilities include: (1) encouraging the formation of Industrial Technology Partnerships and binational technology joint ventures designed to achieve major advances in technology and innovation; (2) identifying and removing Governmental barriers to and providing incentives for productivity growth and international competitiveness; (3) disseminating productivity know-how to business; and (4) coordinating the formulation and implementation of policies for strategic resources, technology transfer, patent policy, metric conversion, the Center for the Utilization of Federal Technology, and patent licensing.

The FY 1987 budget request provides for the elimination of all Productivity, Technology, and Innovation programs beginning January 1, 1987 and scheduled for completion by September 30, 1987. The patent licensing program will continue to be conducted by the National Technical Information Service. The productivity, technology, and innovation program is being proposed for elimination because it has completed its mission and much of the work can be provided through other Government agencies and through private sector, advisory groups.

Activity/Subactivity Change Crosswalk

(Dollar amounts in thousands)

Format of Fiscal 1986 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Salaries and expenses:	
Economic Analysis:	
National economic accounts	$11,643
Analysis of business trends.	5,706
International economic accounts.	6,117
Subtotal, Economic Analysis.	23,466
Policy Support:	
Policy support	5,357
Productivity, Technology, and Innovation:	
Productivity, technology, and innovation	1,739
Dissemination of Technical Information:	
Dissemination of technical information .	443
Total, Salaries and expenses	31,005

Format of Fiscal 1987 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Salaries and expenses:	
Economic Analysis:	
National economic accounts	$11,643
Analysis of business trends.	5,706
International economic accounts.	6,117
Subtotal, Economic Analysis.	23,466
Policy Support:	
Policy support	5,357
Productivity, technology, and Innovation:	
Productivity, technology, and innovation	2,182
Total, Salaries and expenses	31,005

Appropriation Language and Code Citations:

1. For necessary expenses, as authorized by law, of economic and statistical analysis programs.

15 U.S.C. 171 et seq., 175, 271 et seq., 1501 et seq., 1507, 1512 et seq., 1516, 3704-05, 3710;
22 U.S.C. 286f, 3101-08;
30 U.S.C. 1604;
35 U.S.C. 200-206;
40 U.S.C. 759(f);

15 U.S.C. 171 et seq. provides for the establishment of the parent organization of the Bureau of Economic Analysis (BEA).

15 U.S.C. 175 provides the authority and responsibility for the functions of the Bureau of Economic Analysis.

15 U.S.C. 271 et seq. provides for the establishment of the organization of the National Bureau of Standards and associated metric functions.

15 U.S.C. 1501 et seq. provides the Secretary of Commerce with the authority to carry out the functions of the Under Secretary.

15 U.S.C. 1507 provides for the position of the Assistant Secretary for Productivity, Technology, and Innovation.

15 U.S.C. 1512 et seq. provides the Department of Commerce with the authority to foster, promote, and develop the foreign and domestic commerce of the United States, to the extent necessary for the performance of the ESA functions.

15 U.S.C. 1516 provides the Department of Commerce with the authority to gather and distribute certain statistical information.

15 U.S.C. 3704-05, and 3710 provides the Department of Commerce with the authority relating to studies of technological development in the United States, cooperative technology arrangements, and the transfer of industrial technology from the Federal Government to the private sector.

22 U.S.C. 286f provides that the President shall make available balance of payments information as required by the Bretton Woods Agreements Act. The Bureau of Economic Analysis was assigned responsibility for the collection of certain balance of payments data and the publication of the U.S. balance of payments accounts.

22 U.S.C. 3101-08 provides that the President shall undertake mandatory surveys of U.S. direct investment abroad and foreign direct investment in the United States. The Bureau of Economic Analysis was assigned responsibility for the direct investment surveys under this Act by Executive Order No. 11961 and subsequent Departmental delegation.

30 U.S.C. 1604 provides the Department of Commerce with the authority relating to the preparation of reports on user needs for critical materials.

35 U.S.C. 200-206 provides the Department of Commerce with the lead agency responsibility with respect to the implementation of Federal patent policy.

40 U.S.C. 759(f) provides the authority to (1) exercise the functions of the Secretary of Commerce under provisions in Federal Information Processing Standards authorizing the Secretary to waive compliance with requirements of the standards; (2) issue interpretive guidelines concerning the waiver provisions of the standards; and (3) join with the Director, National Bureau of Standards, in recommending to the Secretary the establishment of uniform Federal automatic data processing standards.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986.			618	$30,500
ESA-9	Adjustments to base and built-in changes:				
	Other increases.	...	+$698		
	Other decreases.	...	-250		
	Subtotal, adjustments to base and built-in changes			...	+448
	1987 Base.			618	30,948

Page No.	Comparison by activity:	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-) Over 1987 Base	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Economic Analysis:										
ESA-12	National economic accounts.	235	$10,593	235	$10,689	235	$10,893	235	$11,643	...	+$750
		(216)	(10,455)	(237)	(10,680)	(237)		(237)		(...)	
ESA-19	Analysis of business trends	101	5,551	101	5,601	101	5,706	101	5,706	...	...
		(94)	(5,481)	(104)	(5,597)	(104)		(104)		(...)	
ESA-22	International economic accounts	141	5,942	141	5,997	141	6,117	141	6,117	...	...
		(129)	(5,863)	(141)	(5,991)	(141)		(141)		(...)	
	Subtotal, Economic Analysis.	477	22,086	477	22,287	477	22,716	477	23,466	...	+750
		(439)	(21,799)	(482)	(22,268)	(482)		(482)		(...)	
	Policy Support:										
ESA-26	Policy support.	82	5,271	82	5,263	82	5,357	82	5,357	...	...
		(77)	(5,197)	(83)	(5,259)	(83)		(83)		(...)	
	Productivity, Technology, and Innovation:										
ESA-28	Productivity, technology, and innovation.	59	3,295	59	2,950	59	2,875	8	2,182	-51	-693
		(48)	(3,244)	(53)	(2,949)	(53)		(20)		(-33)	
	Change									-51	+57
										(-33)	
	Total, requirements.	618	30,652	618	30,500	618	30,948	567	31,005		
		(564)	(30,240)	(618)	(30,476)	(618)		(585)			

NOTE: The permanent positions column in parenthesis represent total workyears and amounts in parenthesis represent obligations.

Justification of Adjustments to Base and Built-in Changes
(Dollar amounts in thousands)

	Perm. Pos.	Amount
Other increases		
Restoration of the FY 1986 pay reduction	...	+$163
Within-grade step increases	...	...
Federal Insurance Contributions Act (FICA)	...	+30
Health insurance premiums	...	+8
Employees' Compensation Fund	...	+3
Domestic air fare	...	+6
Standard level user charges	...	+288
Federal telecommunications system	...	+4
Postal rate	...	+8
Printing and reproduction	...	+51
Working capital fund	...	+126
Supplies and materials	...	+11
Subtotal, other increases	...	+698

Restoration of the FY 1986 pay reduction:

	Perm. Pos.	Amount
Total cost in FY 1986 of the proposed 5 percent pay reduction	...	+812
Less 80 percent restoration in FY 1986	...	-649
Subtotal, additional amount needed in FY 1987 to restore full year cost	...	+163

Within-grade step increases:

An amount of $228,000 would be needed to cover the cost of within-grade increases. A savings of $228,225 results from absorbing within-grade increases. The computation is as follows:

Estimated number of within-grade step increases scheduled	319	
Step increases not earned due to turnover	33	
Average step above step 1 per separation	3	
Average cost per within-grade step increase	$957	
Gross cost of scheduled step increases		$305,283
Less savings due to separations		-94,743
Subtotal, personnel compensation		210,540
Personnel benefits at 8.4 percent		17,685
Total cost		228,225
Less amount absorbed		-228,225
Total amount requested		...

Federal Insurance Contributions Act (FICA):

An increase of $30,000 is required to cover the cost of the Federal Insurance Contributions Act (FICA). The maximum taxable salary increased from $41,700 to $43,200.

Health insurance premiums:

The cost of the Government's contribution to Federal employee's health insurance premiums increased by 1.87 percent effective January 1985. This increase requires an additional $8,000 calculated on the FY 1986 estimate of $403,000.

Employees' Compensation Fund:

The increase of $3,000 in the repayment to the Employees' Compensation Fund is the result of higher costs in the year ending June 30, 1985. The charges will be reimbursed to the Department of Labor, Employees' Compensation Fund in FY 1987 pursuant to Public Law 86-767, as amended.

Domestic air fare:

The official rate for domestic air fare increased 6 percent. This requires an additional $6,000 calculated on the FY 1986 estimate of $98,000.

Standard level user charges:

The GSA is expected to increase the cost of currently occupied space in FY 1987. In anticipation of the rate increase, the FY 1986 rent payments of $2,052,000 have been increased by $288,000 for a total requirement of $2,340,000 in FY 1987.

Federal telecommunications system (FTS):

The cost of FTS services is expected to increase in FY 1987. The 3.7 percent GNP deflator was applied to the FY 1986 estimate of $110,000 to arrive at the $4,000 increase.

Postal rate:

The United States Postal Service was allowed an overall rate increase of 9.5 percent on February 17, 1985. This increase requires an additional $8,000 calculated on the FY 1986 estimate of $88,000.

Printing and reproduction:

The cost of printing (paper, labor, and commercial procurement prices) continues to increase. The requested increase of $51,000 is intended to offset a portion of the increase which occurred in the past year and represents 6.5 percent of the amount of $788,000 in the FY 1986 estimate column.

Working capital fund:

The request of $126,000 would fund inflationary cost increases in the Departmental working capital fund to maintain the current level of operations. These include items such as within-grade step increases, rent payments to GSA, payroll costs, and other adjustments which are beyond the control of the Department.

Supplies and materials:

The increase in the cost of supplies and materials is based on the GNP deflator in the President's 1986 Budget. The $11,000 increase represents 3.7 percent of the FY 1986 estimate of $286,000.

	FTE	Amount
Other decreases		
Management savings	...	-$150
Recurring program decrease	...	-100
Subtotal, other decreases	...	-250

Management savings:

These savings include a goal of reducing the cost of positions in grades GS-11-15 by $150,000. These savings may be achieved by improved overall position management or through other administrative cost reductions.

Recurring program decrease:

This $100,000 reduction is part of a continuing attempt to put the Patent Licensing Program on a self-supporting basis and would be offset by retention of additional licensing fees for costs related to licensing development, negotiation, maintenance, and administration.

Justification of Program and Performance

Activity: Economic Analysis
Subactivity: National economic accounts

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
National income and product and wealth accounts.	116	$5,408	116	$5,456	116	$5,556	116	$6,306	...	+$750
	(106)	(5,338)	(116)	(5,451)	(116)		(116)		(...)	
Interindustry accounts	31	1,348	31	1,360	31	1,387	31	1,387	...	...
	(28)	(1,330)	(31)	(1,359)	(31)		(31)		(...)	
Regional accounts.	88	3,837	88	3,873	88	3,950	88	3,950	...	...
	(82)	(3,787)	(90)	(3,870)	(90)		(90)		(...)	
Total requirements.	235	10,593	235	10,689	235	10,893	235	11,643	...	+750
	(216)	(10,455)	(237)	(10,680)	(237)		(237)		(...)	

Goals and Objectives

Goals: To provide a clear picture of the U.S. economy through the preparation, development, and interpretation of the economic accounts of the United States.

Objectives: To maintain and improve the system of national economic accounts. The national economic accounts consist of the national income and product and wealth accounts, which provide an overall view of the economic process; the interindustry accounts, which show how the various industries of the Nation interact to produce the gross national product (GNP); and the regional accounts, which provide detail on economic activity by region, State, Metropolitan Area, and county.

Base Program

National income and product and wealth accounts - This work consists of the preparation, development, and analysis of the national income and product and wealth accounts, and measures relating to environmental change. The national income and product accounts, summarized by the GNP, provide an up-to-date, overall view of national production, its distribution, and its use as shown by the interrelated receipts and expenditures of producers, consumers, investors, government, and the foreign customers of the United States. The wealth accounts show the business and other components of tangible national wealth. Measures relating to environmental change include estimates of the costs for pollution abatement and control prepared within the framework of the national economic accounts. More specifically, the output consists of the following:

1. Monthly personal income and outlays - These estimates show personal income by type, personal taxes, total and per capita disposable personal income in current and constant dollars, personal consumption expenditures in current and constant dollars, and personal saving. Estimates of personal income and outlays are released to the public 2 weeks after the close of the reference month and are published monthly in the Survey of Current Business (Survey).

2. GNP estimates - These estimates show GNP by type of expenditure, type of product, sector, and industry, in current and constant dollars; gross domestic product, net national product, and national income, by sector and industry, in current and constant dollars; command GNP and command national income in constant dollars; gross domestic product of corporate business in current and constant dollars; motor vehicle output, farm output, and housing output, in current and constant dollars; personal income and its disposition; personal consumption expenditures by major type of product, in current and constant dollars; national income by type of income and industry; government receipts and expenditures, by type; government purchases of goods and services, by type, in current and constant dollars; government gross fixed capital formation; government expenditures by type and function; foreign transactions; saving and investment; private purchases of producers' durable equipment and structures, by type, in current and constant dollars; inventories and final sales of business, in current and constant dollars; number of employees, persons engaged in production, hours worked by employees and persons engaged in production, corporate profits, corporate income taxes, dividends, and undistributed profits, by industry; and price measures for GNP and its components.

   Preliminary estimates in considerable detail are released to the public 2 weeks after the end of the quarter, and are published in the Survey in the first month after the end of the quarter. The first full set of quarterly estimates is released to the public about 6 weeks after the end of the quarter, and is published in the Survey in the second month after the end of the quarter. A revised full set of quarterly estimates is released to the public 10 weeks after the end of the quarter, and is published in the Survey in the third month after the end of the quarter.

   Preliminary annual estimates for the preceding year are published in the January Survey. Estimates for the 3 most recent years are revised on the basis of more comprehensive information, and, except in benchmark years, are published in the July Survey. The greater wealth of underlying data permits the publication of considerably more detail than is possible for the quarterly figures. About 130 tables are shown in the July Survey; quarterly estimates from 47 of these tables are published monthly in the Survey.

   Comprehensive GNP benchmark estimates are prepared based largely on the results of the quinquennial economic censuses and the benchmark input-output tables. The results of the most recent benchmark revision, which incorporated the 1977 input-output tables and preliminary results of the 1982 economic censuses, were published in the December 1985 Survey. (Two supplements are scheduled for publication in the Spring of 1986.)

3. Government budgets in the GNP framework - The Federal and State and local budgets prepared within the GNP framework provide a means of gauging the effect of government fiscal policies on the economy. Detailed reconciliations between this concept of the Federal budget and the budget prepared by OMB are made on a quarterly basis and published in the July Survey. An analysis of the impact of the Federal budget on the economy is published in the February Survey.

Quarterly estimates of cyclically-adjusted budgets are prepared. These estimates show the Federal receipts, expenditures, surplus or deficit, and Federal debt that would be generated if the economy were growing without cyclical fluctuation. Estimates reflecting the current year's fiscal policies are published quarterly. Estimates reflecting the policies underlying the Federal budget for the upcoming fiscal year are published in the February *Survey*.

Quarterly estimates of national defense purchases of goods and services are prepared in current and constant dollars. Measures of price change are calculated for approximately 150 categories of purchases. Estimates are published monthly in the *Survey* as a part of the GNP.

4. GNP by industry - Preliminary annual estimates of GNP by industry, in current and constant dollars, are published in the April *Survey*. The estimates are revised on the basis of more comprehensive information and, except in benchmark years, are published in greater industrial detail in the July *Survey*.

5. Fixed capital - Estimates of the nonresidential fixed business capital of the United States are made annually by detailed industry. These cover gross and net capital stocks, depreciation, discards, and average ages of net and gross capital stocks. The estimates are provided by legal form of organization in historical-cost, constant-cost, and current-cost valuations, and by type of structure and equipment and by detailed industry. Summary estimates are published in the August *Survey*. Detailed estimates were published in the July 1985 *Survey* and in special supplements.

   Estimates of the value of the Nation's stock of housing are made annually. These estimates show gross and net stocks, in historical-cost, constant-cost, and current-cost valuations, of the value of the farm and nonfarm housing stock, by type of structure -- one-to-four dwelling unit structures, structures containing five or more dwelling units, mobile homes, and owner- and tenant-occupied dwelling units. Summary estimates are published in the August *Survey*. More detailed estimates are published in special supplements.

   Estimates of the value of the stock of consumer durables are made annually. These estimates show gross and net stocks of durable goods owned by consumers in constant-cost and current-cost valuations. Summary estimates are published in the August *Survey*. More detailed estimates are published in special supplements.

   Estimates of the value of the stock of fixed capital owned by the Federal Government and by State and local governments are made annually. These estimates show gross and net stocks, in constant-cost and current-cost valuations, for all government, the Federal Government, and State and local governments separately for equipment and structures. Summary estimates are published in the August *Survey*. More detailed estimates are published in special supplements.

6. Inventories and business sales - Estimates of inventories and final sales of business, in current and constant dollars, and inventory-sales ratios are published quarterly in the *Survey*, as are separate estimates of manufacturing and trade. Estimates of manufacturing inventories by stage of fabrication also are published quarterly.

7. Environmental statistics - Annual estimates of capital expenditures and operating costs for pollution abatement and control, prepared within the framework of the national economic accounts, are published in the *Survey*. These estimates are prepared in current and constant dollars and are classified by sector of the economy (consumers, business, and government) and by the element of the environment affected (air, land, and water). Actual and expected business capital expenditures for pollution abatement, covering all nonfarm industries, are prepared annually and published in the *Survey*. Estimates of the gross and net stocks of pollution abatement capital, in constant-cost and current-cost valuations, are prepared annually and published in the *Survey*.

8. Special compilations for international organizations - Official translations of the U.S. national income and product accounts into the forms prescribed by the United Nations and the Organization for Economic Cooperation and Development (OECD) are prepared for these organizations.

Interindustry accounts - This work consists of the preparation, development, and analysis of input-output tables. Input-output tables show how the various industries of the Nation interact to produce GNP. More specifically, the output consists of the following:

1. Input-output tables - Input-output tables show, for each industry, the amount of its output that is used by other industry as raw materials or semi-finished products, as well as the sales to the final markets -- consumers, business investors, government, and foreigners. They also show, for each industry, its consumption of the output of every industry, and its value added (total industry output less the value of materials consumed and services purchased).

   Comprehensive benchmark input-output tables are prepared every 5 years. The most recent benchmark input-output tables at the 537 industry level are for 1977 and were published in the May and October 1984 *Surveys* and supplements. Summary annual input-output tables, prepared in less industrial detail, update the benchmark tables. Summary input-output tables for 1976, 1978, and 1979 were published in a BEA Staff Paper in January 1983. Articles that explain and use the input-output tables as tools of economic analysis also are published in the *Survey*. Special analyses are prepared of the impact on the various industries of changes in specified final demands, output of other industries, and prices.

2. Capital goods flow tables - Tables showing capital goods flows from producing to using industries are prepared for the same years as the benchmark input-output tables. The most recent capital goods flow tables are for 1977 and were published in the November 1985 *Survey*.

3. Employment and employee compensation tables - Tables showing the number of employees, compensation, wages and salaries, and supplements for each industry in the detailed benchmark input-output table are published in the *Survey*. The most recent employment and employee compensation tables are for 1977 and were published in the November 1985 *Survey*.

Regional accounts - This work consists of the preparation, development, and analysis of the regional accounts. The regional accounts provide detail on economic activity by region, State, Metropolitan Area, and county. More specifically, the output consists of the following:

1. Personal income, by State - Annual estimates of personal income and disposable personal income by State and for the District of Columbia are prepared twice each year and published in the Survey, first in April on the basis of preliminary and incomplete data, and next in August when more reliable and detailed estimates can be made. The April issue contains preliminary estimates of total and per capita personal income, including percent changes in selected sources of personal income. Articles analyzing the changes in the geographic distribution of personal income are published periodically in the Survey. The August issue presents revised estimates of personal income subdivided by type of income and by major industry of origin.

   Quarterly estimates of total personal income by State are published in the Survey in the fourth month after the end of the quarter. Estimates of the 3 most recent years are revised on the basis of more comprehensive information and are published in the October Survey.

2. Personal income, by county - Annual estimates of total and per capita personal income are published in the April Survey for each of the more than 3,100 counties and county equivalents in the United States. A detailed breakdown of county personal income subdivided by type of income and by major industry of origin is published each summer in special supplements. These estimates constitute the only comprehensive and detailed economic series available annually on a local area basis.

3. Personal income, by Metropolitan Area - Annual estimates of total and per capita personal income are published in the April Survey for each of the designated Metropolitan Areas. Detailed estimates of personal income, subdivided by type of income and by major industry of origin for each Metropolitan Area, are published each summer in special supplements.

4. Regional, State, and local area economic analyses - Analyses are carried out to identify and measure the factors that determine area differences in levels and growth rates of total personal and per capita income and of industrially-detailed earnings, employment, and output. These analyses are needed to improve the techniques for preparing the State and local area economic projections, and to assess, in advance, the area effects of alternative development programs. Analyses are published in the Survey and in special supplements.

5. Regional, State, and local area economic projections - Projections of personal income, employment, earnings (of persons) by industrial source, and population are prepared every 5 years for each State and the District of Columbia and for all Metropolitan Areas. During the interim period, economic projections are made for selected State and local areas. Economic projections are published in the Survey and in special supplements.

Increase for FY 1987

(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
National income and product and wealth accounts.	116 (116)	$5,556	116 (116)	$6,306	... (...)	+$750

Improvements in the annual tabulations of corporate tax return data ($750,000) - This request would provide funds for the Bureau of Economic Analysis (BEA) to reimburse the Internal Revenue Service (IRS) for improvements in the annual tabulations of corporate tax return data that are required for BEA's preparation of the GNP measures. It would provide financing to restore IRS cuts in the: (1) size of the IRS sample used to prepare its tabulations, (2) IRS statistical editing, and (3) preparation of preliminary tabulations.

The IRS corporate tax return tabulations are essential to the preparation of the GNP measures. They are the major source for components of the GNP accounts that in 1981 accounted for about $490 billion (16.6 percent) of GNP, about $164 billion (7.8 percent) of personal income, and about $66 billion (10.5 percent) of Federal Government receipts. No adequate substitutes exist for the IRS data. The values for 1981 of the specific GNP components for which the IRS data are required are corporate profits before tax, $197 billion; corporate depreciation, $195 billion; dividends, $66 billion; corporate tax liability, $66 billion; corporate pension plan contributions, $53 billion; corporate net interest, $21 billion; nonfarm corporate nonresidential rental income of persons, $18 billion; certain business transfer payments, $6 billion; personal consumption expenditures for certain services, $55 billion; and corporate nonfarm change in business inventories for industries other than manufacturing and trade, $7 billion.

Approximately $400 thousand of this budget request would be used to reimburse IRS to restore the size of its sample to 120 thousand corporations. Reductions in the size of the IRS sample used to prepare its tabulations of corporate tax return data have substantially reduced the statistical reliability of the data. The sample has been reduced from 120 thousand corporations for 1972 to 90 thousand corporations for 1983, in spite of an increase in corporate tax returns from 1.9 million to 3.2 million during this period.

Approximately $200 thousand of this budget request would be used to reimburse IRS to restore more comprehensive statistical editing procedures for the data that are used to prepare the corporate tax return tabulations. IRS undertakes statistical editing of the data to ensure internal consistency. Reductions in resources that IRS devoted to statistical editing of detailed income and expense items have reduced the quality of many of the GNP component measures, especially depreciation, dividends, interest, and rent.

The remaining $150 thousand of this budget request would be used to reimburse IRS to restore the preparation of preliminary tabulations that would be available for incorporation in the GNP measures 1 year earlier than the present tabulations. Such preliminary tabulations were prepared until 1977 and permitted the incorporation of tax return data, which are more reliable than the advance indicators used by BEA, with a lag of 2 years instead of 3 years. For example, in the July 1984 GNP revision, covering 1981-1983, BEA had only 1981 final IRS tabulations. If IRS were still providing preliminary tabulations, BEA also would have had preliminary data for 1982, which would have added to the statistical reliability of the GNP measures.

Maintaining the quality of the IRS corporate tax return tabulations is essential because these data are a principal source for important GNP components and for estimates of GNP by industry. The Government depends on reliable GNP estimates for the formulation and execution of fiscal and monetary policies, and the business sector uses these estimates in planning investments, production, and marketing.

The object class detail for the increase follows:

	Amount
Other services	$750,000
Total	750,000

Activity: Economic Analysis
Subactivity: Analysis of business trends

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Business outlook	51 (49)	$2,471 (2,440)	51 (54)	$2,494 (2,493)	51 (54)	$2,540	51 (54)	$2,540	... (...)	$...
Statistical indicators	18 (16)	1,038 (1,025)	18 (18)	1,047 (1,046)	18 (18)	1,067	18 (18)	1,067	... (...)	...
Current business analysis.	32 (29)	2,042 (2,016)	32 (32)	2,060 (2,058)	32 (32)	2,099	32 (32)	2,099	... (...)	...
Total requirements.	101 (94)	5,551 (5,481)	101 (104)	5,601 (5,597)	101 (104)	5,706	101 (104)	5,706	... (...)	...

Goals and Objectives

Goals: To provide a clear picture of the U.S. economy through the preparation, development, and interpretation of the economic accounts of the United States.

Objectives: To maintain and improve the measures and analyses that extend the usefulness of the economic accounts. These include surveys of business investment, econometric models of the U.S. economy, a system of business cycle indicators, and analyses of the economic situation.

Base Program

Business outlook - This work consists of the preparation, development, and analysis of surveys of the investment outlays and plans of U.S. business, and econometric model forecasts and simulations. More specifically, the output consists of the following:

1. Surveys and analyses of expenditures for plant and equipment:

   (a) Quarterly data covering approximately 90 percent of capital expenditures by nonfarm business are published in the April, June, September, and December *Surveys*. Each quarterly article includes data on actual expenditures for the previous quarter and planned expenditures for the current quarter and for each of the next two quarters.

   (b) Annual data covering approximately 90 percent of capital expenditures (actual and planned) by nonfarm business are published in the June, September, and December *Surveys*. Annual data covering all capital expenditures (actual and planned) by nonfarm business are published in the April *Survey*. Annual percent change in prices of capital goods purchased, by major manufacturing and nonmanufacturing sectors, annual percent change in the prices of goods and services sold by manufacturers and utilities, and annual percent change in business sales by manufacturers, trade, and utilities, also are published in the April Survey.

(c) Comprehensive benchmark estimates are prepared based on the results of the quinquennial economic censuses of the Census Bureau and on other data from other agencies. The results of the most recent benchmark revision, which incorporates the 1977 economic censuses, were published in the February 1985 Survey.

(d) Analyses of the impact of investment on the economy and of the impact of the economy on investment are published in the Survey and in BEA Staff Papers. Examples are the effects of plant and equipment outlays on GNP, employment, and unemployment, and the effects of financial conditions on plant and equipment outlays. In addition, special studies on investment activity are undertaken from time to time for the Secretary of Commerce, CEA, other Government agencies, and Congressional committees.

2. Econometric model - Short-term forecasts of economic activity are made eight times a year using a quarterly econometric model of the U.S. economy consisting of about 250 equations. In addition, econometric studies for special policy-oriented analyses are made on request.

Statistical indicators - This work consists of the preparation, development, and analysis of a system of leading, coincident, and lagging business cycle indicators, and data that depict long-term economic trends. More specifically, the output consists of the following:

1. Business cycle indicators - Business Conditions Digest (BCD), a monthly compendium of economic indicators, presents approximately 300 monthly and quarterly seasonally adjusted economic time series, about 150 of which have been classified as cyclical indicators (i.e., series that conform well to broad fluctuations in aggregate economic activity). The cyclical indicators, classified as leading, roughly coincident, or lagging, the composite indexes derived from them, and related diffusion indexes have been recognized as useful tools for economic forecasting. The remaining series are useful in the interpretation of the economic situation and outlook but they do not qualify as cyclical indicators. Various analytical measures, and summary characteristics of individual series also are shown. The series are shown in graphic and tabular form.

2. Long Term Economic Growth, a report designed to complement the business cycle publications, presents approximately 1,200 annual economic time series needed in the analysis of long-term economic trends. The most recent report, covering the period 1860-1970, was published in June 1973.

Current business analysis - This work consists of the preparation of analyses of the economic situation and outlook, the Survey, and the provision of information services. More specifically, the output consists of the following:

1. Analysis of the economic situation - Analyses of current economic conditions and the near-term outlook are published in "The Business Situation" section of the Survey. These analyses are prepared within the framework of the economic accounts. A review and interpretation of the preliminary GNP estimates and also a preview of them, based on data available 1 month earlier, are published quarterly.

In addition, analyses of specific aspects of the economic situation are published. Examples are: residential construction; the labor market; price changes; financial developments; and developments in particular industries, such as steel and autos, that have an important influence on short-term business activity.

2. Statistics and explanatory notes are published monthly in the "S-pages" of the Survey. These carry approximately 1,950 separate series. Used in conjunction with the biennial Business Statistics supplements to the Survey, they provide continuous and consistent series running back many years, and cover all major aspects of the economy. Most of the series are obtained from other Government agencies and from private organizations.

3. The biennial Business Statistics supplements provide back data for series published in the monthly issues of the Survey, most of them in the "S-pages". Explanatory notes define terms, give sources of data, and describe methods of compilation.

4. Preparation of the Survey - This includes the review and coordination of the layout, chartwork, and mechanics of preparing the copy of the Survey for the printer. Similar support is provided for other BEA publications.

5. Editorial and publications services - This includes the substantive and editorial review of all BEA monographs and press releases and the provision of publications production services.

Activity: Economic Analysis
Subactivity: International economic accounts

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Balance of payments accounts	64	$2,792	64	$2,818	64	$2,874	64	$2,874	...	$...
	(58)	(2,755)	(63)	(2,815)	(63)		(63)		(...)	
International investment estimates . .	77	3,150	77	3,179	77	3,243	77	3,243	...	...
	(71)	(3,108)	(78)	(3,176)	(78)		(78)		(...)	
Total requirements.	141	5,942	141	5,997	141	6,117	141	6,117	...	...
	(129)	(5,863)	(141)	(5,991)	(141)		(141)		(...)	

Goals and Objectives

Goals: To provide a clear picture of the U.S. economy through the preparation, development, and interpretation of the economic accounts of the United States.

Objectives: To maintain and improve the system of international economic accounts. The international economic accounts consist of the balance of payments accounts, which give detail on U.S. transactions with foreign countries, and the international investment estimates, which measure the international investment position of the United States.

Base Program

Balance of payments accounts - This work consists of the preparation, development, and analysis of the balance of payments accounts, which provide a comprehensive and detailed view of economic transactions between the United States and foreign countries. Major types of transactions covered are merchandise trade, travel, transportation, income on international investment, U.S. Government military and other services, U.S. private services, private remittances, foreign aid programs, short- and long-term private capital flows, and changes in foreign official assets in the United States and U.S. official reserve assets. More specifically, the output consists of the following:

1. Balance of payments estimates - Estimates containing all major components of the balance of payments accounts, including regional and country breakdowns, are published quarterly in the Survey. The regional and country breakdowns consist of bilateral balance of payments estimates for the European Communities, United Kingdom, total Western Europe, Eastern Europe, Canada, Latin American Republics and other Western Hemisphere countries, Japan, other countries in Asia and Africa, Australia, New Zealand and South Africa combined, and international organizations.

Abbreviated quarterly balance of payments estimates are prepared from fragmentary data in the last month of each quarter for use by the Department of Commerce, CEA, FRB, OMB, and Department of the Treasury. The full set of quarterly estimates is released to the public about 10 weeks after the end of the quarter, and is published in the Survey in the third month after the end of the quarter. Regular quarterly articles on the balance of payments also are published in the Survey. These analyze current developments in the U.S. balance of payments, changes in the foreign exchange value of the U.S. dollar, and the economic developments here and abroad that affect them.

Preliminary annual estimates for the preceding year are published in the March Survey. Estimates for at least the 3 most recent years are revised on the basis of more comprehensive information, and are published in the June Survey.

Annual bilateral balance of payments accounts for Mexico, Venezuela, Belgium-Luxembourg, the Netherlands, France, West Germany, Italy, Australia, and South Africa are published in the June Survey. The bilateral accounts with members of the Organization of Petroleum Exporting Countries are published annually in either the March or June Survey. The U.S. balance of payments current account with Canada is reconciled with Canadian data and the results are published in the Survey.

Short-term projections of the balance of payments are prepared at least four times a year for Government use, in collaboration with an interagency committee.

2. Special analyses - Special analyses of current developments related to the balance of payments are prepared. Examples are the effects of changes in exchange rates and prices on U.S. trade, the impact of petroleum transactions on the balance of payments, and appraisals of the balance of payments presentations.

3. Merchandise trade - Special estimates of foreign trade data on a balance of payments basis are maintained which show consistent time series for commodities classified by end-use categories. Estimates of merchandise trade on a balance of payments basis are released to the public about 9 weeks after the end of the quarter, and are published in the Survey in the third month after the end of the quarter. Monthly estimates are prepared for internal use.

4. International travel, transportation, and other services - Detailed estimates of receipts and payments arising from international travel and transportation, military expenditures and sales, and of a number of other U.S. Government and private service transactions and private remittances are prepared for the balance of payments accounts. These estimates are published quarterly in the Survey. An article providing annual detailed information on travel by country and by type of travel is published in the May Survey.

5. Government grants and credits - Quarterly estimates are prepared, giving information by program on grants, credits, and other assistance to foreign countries by the U.S. Government. These estimates are included in the quarterly balance of payments accounts. In addition, more detailed information is published primarily for use by the Congress and other Government agencies. These data are used to compile the official record of outflows to, and receipts from, foreign countries for Government aid and credit programs.

Special compilations of Government grants and credits are prepared for OMB for use in the annual budget message, and for the Department of the Treasury for use in annual reports on the international financial transactions of the Government. In addition, a detailed report is prepared annually for the use of the Development Assistance Committee of the OECD.

6. Private capital (other than direct investment) - Tabulations of banking and securities transactions and of corporate transactions with unaffiliated foreigners are prepared, and income on these investments is calculated. These estimates are included in the quarterly balance of payments accounts.

7. International investment position of the United States - Detailed annual estimates are prepared of the international assets and liabilities of the United States, changes in its net investment position, and factors accounting for these changes. These estimates, published in the June _Survey_, can be reconciled with the capital flows shown in the balance of payments accounts.

8. Special compilations of the balance of payments accounts - Special versions of the balance of payments accounts are prepared to fulfill the Government's commitment to provide information to the International Monetary Fund, the International Bank for Reconstruction and Development, the United Nations, and the OECD. These may differ in format and content from the official U.S. presentation.

International investment estimates - This work consists of the preparation, development, and analysis of estimates of U.S. direct investment abroad; foreign direct investment in the United States; income flows associated with these investments; and other economic transactions of multinational enterprises, including their trade, employment, taxes, and plant and equipment expenditures. More specifically, the output consists of the following:

1. Regular sample surveys - Quarterly surveys of U.S. direct investment abroad and of foreign direct investment in the United States are taken in order to obtain data on income and capital flows for inclusion in the quarterly balance of payments accounts. A more detailed annual recapitulation of the results of these surveys is published in the August issue of the _Survey_. These annual reports give detailed information by country and industry on equity and intercompany account flows, income, reinvested earnings, royalties and fees, and the direct investment position at the end of each year.

   Semiannual surveys are taken of current and projected plant and equipment expenditures of foreign affiliates of U.S. firms. The results are published in the March and September issues of the _Survey_.

   Annual surveys of foreign direct investment in the United States and of U.S. direct investment abroad gather other financial and operating data, such as on employment, sales, trade, and property, plant, and equipment. The results of the most recent annual survey covering 1983 were published in the January 1986 _Survey_.

2. Benchmark surveys - These surveys cover transactions between all U.S. parent organizations and their foreign affiliates, and between foreign parent organizations and their U.S. affiliates. Other economic information collected relating to U.S. parents and U.S. and foreign affiliates include sales, trade, employment, balance sheets, and income statements. The estimates for these multinational companies from the benchmark surveys are shown separately by industry, and by country, or region. The results of the benchmark survey of U.S. direct investment abroad for 1982 were summarized in the December 1985 _Survey_ and also were published in detail as a special supplement in December 1985. The results of the most recent

benchmark survey of foreign direct investment in the United States for 1980 were summarized in the October 1983 Survey, and were published in detail as a special supplement in October 1983.

3. Multinational company activities - An information system is maintained which integrates the international and domestic data for multinational companies collected by BEA. This system provides for the production of organized and consistently defined information on U.S. companies and their foreign affiliates, and on foreign companies and their U.S. affiliates, at the needed level of detail, including data on type of ownership, industry, and country classification. Data are stored in accessible form and are organized to facilitate the matching of benchmark surveys against sample surveys, permitting efficient blowups of sample surveys to universe estimates. Analyses utilizing the data are published in the Survey covering such topics as the role of multinational companies and their foreign affiliates in U.S. international trade, the employment and payroll costs of multinational companies, and estimates of gross product (value added) of foreign affiliates of U.S. companies and of U.S. affiliates of foreign companies.

Justification of Program and Performance

Activity: Policy Support
Subactivity: Policy support

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Economic policy support.	41	$2,776	41	$2,757	41	$2,805	41	$2,805	...	$...
	(43)	(2,737)	(41)	(2,755)	(41)		(41)		(...)	
Business analysis.	41	2,495	41	2,506	41	2,552	41	2,552	...	...
	(34)	(2,460)	(42)	(2,504)	(42)		(42)		(...)	
Total requirements.	82	5,271	82	5,263	82	5,357	82	5,357	...	...
	(77)	(5,197)	(83)	(5,259)	(83)		(83)		(...)	

Goals and Objectives

Goals: To support the Secretary, Under Secretary, and other Government officials in interpreting the state of the economy, and on matters relating to economic policy.

Objectives: To advise the Secretary, Under Secretary, and other Government officials on matters related to economic developments and forecasts, and the development of options and positions relating to economic policy; and to support the Secretary's and the Under Secretary's participation in the Economic and Domestic Policy Councils, and in similar Administration economic policy forums.

Base Program

Economic policy support - The output consists of the following:

1. Reports, articles, and speeches on the economic situation are prepared, and regular and special studies on economic conditions and developments are conducted. Analyses include forecasts of aggregate economic activity, as well as reviews of current economic conditions in key sectors. Reports and analyses on policy issues of concern to the Secretary and the Under Secretary are prepared. Such issues include overall fiscal and monetary policy, tax policy, the sectoral implications of macro-level policies, and the impact of international policy trends on the domestic economy.

2. Information, analysis, and guidance on pending economic policy decisions are provided for the Secretary's and the Under Secretary's participation in the Economic and Domestic Policy Councils, in their working groups, and in similar Administration policy forums. In addition, policy proposals and staff papers are prepared for presentation by the Secretary and Under Secretary to these Councils and forums.

3. Detailed economic forecasts are provided for the Secretary's and Under Secretary's participation in interagency groups. These forecasts are prepared using independent estimating techniques and they incorporate financial sector data and supply variables.

4. Material prepared by other Department of Commerce elements concerning the domestic economic situation is reviewed to ensure that it reflects the most accurate and timely information.

5. Assistance is provided to the Office of Public Affairs and other Commerce elements in responding to news media requests for economic information and interpretation of economic data.

6. Congressional testimony is prepared for the Under Secretary.

7. Participation in policy deliberations of the Organization for Economic Cooperation and Development (OECD) and the International Labor Organization (ILO) is provided.

Business analysis - The output consists of the following:

1. Analyses of the cross-industry effects of macroeconomic developments, trends, proposed and current policies, and unique events, e.g., supply interruptions, strikes, natural disasters, etc., are conducted.

2. Assessments of the impact of selected regulations and legislation on the business community are prepared.

3. Microeconomic research and data base development on industrial energy, price, labor, and capital productivity trends are performed.

4. An annual or biannual analysis and forecast of industrial defense output requirements for emergency preparedness planning are conducted.

5. A computerized economic bulletin board is maintained that provides the Government and private sector with a single source of current economic statistics, such as the Gross National Product, the employment situation, personal income, the consumer price index, and other economic information.

Justification of Program and Performance

Activity: Productivity, Technology, and Innovation
Subactivity: Productivity, technology, and innovation (Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Productivity enhancement	30	$1,568	30	$1,162	30	$1,180	3	$1,033	-27	-$147
	(24)	(1,541)	(26)	(1,161)	(26)		(10)		(-16)	
Policy implementation and coordination	24	1,184	24	1,252	24	1,252	...	706	-24	-546
	(19)	(1,162)	(22)	(1,252)	(22)		(5)		(-17)	
Patent licensing program	5	543	5	536	5	443	5	443	...	...
	(5)	(541)	(5)	(536)	(5)		(5)		(...)	
Total requirements.	59	3,295	59	2,950	59	2,875	8	2,182	-51	-693
	(48)	(3,244)	(53)	(2,949)	(53)		(20)		(-33)	

Goals and Objectives

Goals: To stimulate U.S. private sector productivity, international competitiveness, economic security, and growth.

Objectives: To stimulate private sector cooperative research and development, facilitate commercialization of innovations, support private sector productivity improvement efforts, stimulate binational technology joint ventures, and contribute to U.S. trade objectives through voluntary metric conversion.

Base Program

Productivity enhancement: This work consists of encouraging the formation of Industrial Technology Partnerships and binational technology joint ventures designed to achieve major advances in technology and innovation, of identifying and removing Governmental barriers to and providing incentives for productivity growth and international competitiveness, and of disseminating productivity know-how to business.

Policy implementation and coordination: This work consists of coordinating the formulation and implementation of policies for strategic resources, technology transfer, patent policy, metric conversion, and the Center for the Utilization of Federal Technology.

Patent licensing - This work consists of the use of the incentives of exclusive patent licensing to foster increased commercial development. Each year, Federal laboratories disclose hundreds of new developments, many of which have significant commercial potential. This program has demonstrated that patent licensing is an important mechanism for transferring this technology from Government laboratories to the private sector. Under licenses granted in accordance with the 1980 Act to Amend the Patent and Trademark Laws, licensees pledge millions of dollars to private investment in R&D and new plant construction to create new processes and products, businesses, and jobs. Also economically important, is the program's foreign patent licensing activity which protects Government technology from unrestricted and uncompensated use by foreign competitors of U.S. industry. More specifically, the output consists of the following:

1. The new inventions of client Federal agencies are routinely evaluated, and those selected as having good potential for commercialization are promoted directly to industry for licensing.

2. Foreign patents are filed and maintained on the best inventions to encourage U.S. companies to develop overseas markets, helping to reduce balance of trade deficits.

3. Revenue-bearing exclusive and nonexclusive licenses covering commercial patent rights are negotiated with interested companies, and licenses are monitored for conformance with licensees' product development commitments.

4. Revenues are collected under the terms of each license agreement and Federal inventors receive cash award payments based on a percentage of the revenues received by the Government to provide added incentives for the development of commercially promising inventions in the future.

Receipts collected currently exceed the cost of the licensing activity. Some of these receipts must be returned to the U.S. Treasury, therefore, an annual appropriation is required to partially fund the program. The proposed adjustment to base decrease in the Patent licensing program would not affect NTIS' ability to continue its program of promotion, foreign filing, and licensing of the most commercially valuable Government inventions. This reduction in appropriated funding of $100,000 will be offset by retention of additional licensing fees and deposited in the NTIS Trust Fund, bringing total fees retained in FY 1987 to $507,000 for costs incurred as a result of licensing development, negotiation, maintenance, and administration. These costs include three positions allocated from the Trust Fund ceiling. Licensing revenues in excess of unappropriated program costs will be returned to the U.S. Treasury (an estimated $2,343,000 for FY 1987).

The following table reflects the decrease in appropriation for the Patent licensing program.

Patent Licensing Program Costs and Associated Revenues
(Dollar amounts in thousands)

	FY 1985	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
Program Costs.	$798	$841	$950	$1,000	$1,050	$1,100	$1,150
FUNDING:							
Appropriation.	543	536	443	359	268	180	89
Retainable licensing fees:							
Execution fees	97	95	110	125	130	135	140
Minimum payment fees	158	210	260	310	375	450	500
License management and administrative fees	...	...	137	206	277	335	421
Subtotal, retainable licensing fees. . .	255	305	507	641	782	920	1,061
Total, retainable program funding.	798	841	950	1,000	1,050	1,100	1,150
Running use fees returned to U.S. Treasury .	1,154	1,995	2,343	2,309	2,718	3,080	3,439

Decrease for FY 1987

(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Productivity enhancement	30 (26)	$1,180	3 (10)	$1,033	-27 (-16)	-$147
Policy implementation and coordination	24 (22)	1,252	... (5)	706	-24 (-17)	-546

Productivity, Technology, and Innovation Program (-$693,000 and -51 positions) - This decrease provides for the elimination of all Productivity, Technology, and Innovation programs beginning January 1, 1987 and scheduled for completion by September 30, 1987. The patent licensing program will continue to be conducted by the National Technical Information Service. The productivity, technology, and innovation program is being proposed for elimination because it has completed its mission and much of the work can be provided through other Government agencies and through private sector, advisory groups.

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The position and object class detail for the decrease follows:

Position Title	GS Grade	Number	Annual Salary
Total positions and salaries		-51	-$783,000
Personnel benefits			-82,000
Benefits for former personnel.			+600,000
Travel and transportation of persons			-5,000
Transportation of things			-2,000
Standard level user charges.			-67,000
Communication, utilities, and other rent			-11,000
Printing and reproduction.			-16,000
Other services			-302,000
Supplies and materials			-10,000
Equipment.			-15,000
Total			-693,000

Information Clearinghouse Program - The National Technical Information Service (NTIS) base program provides the central source for the acquisition and public sale of domestic and foreign Federally-funded research, development, and engineering reports and associated business information. NTIS' products and services directly support the U.S. research and development effort and provide unique channels for dissemination of specialized information to business, industry, Government, and the public. The Information Clearinghouse program funds its operating expenses from the sale of its products and services -- not through direct appropriations. The program also provides a facility for the development of new products and services that help improve U.S. productivity and are similarly self-supporting. Approximately 70,000 - 80,000 new technical reports are processed annually and made available. The archival and other service aspects of the NTIS information system and collection attract the establishment of new and viable contacts with Federal agencies to develop or renew information products and services that are available from NTIS. Through the acquisition and distribution of Government-produced computer programs and computerized data bases, access has been provided to bibliographic data bases produced by or for Federal agencies. Access to summaries describing ongoing Federally-funded research projects in the fields of physical sciences, engineering, and life sciences also are available. NTIS strives to establish Government-to-Government agreements for scientific and technical information exchange and to subsequently translate and disseminate this foreign information to U.S. industry upon request. Through the acquisition, translation, and dissemination of this information, NTIS stimulates and supports U.S. industrial innovation and productivity, and assists in strengthening the U.S. competitive position in the world marketplace. A mechanism for responding to technical assistance requests from business, and State and local governments is maintained through a uniform technology transfer policy. Through agreements with the U.S. Department of State's Agency for International Development, access to scientific and technical information resulting from U.S. Government research and development is transmitted to developing countries.

The following table compares the equivalent employment, funding, and obligations for FY 1985-1987:

Financing and Positions
(Dollar amounts in thousands)

	FY 1985 Actual		FY 1986 Estimate		FY 1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Appropriation: Salaries and expenses						
Productivity, technology, and innovation:						
Patent licensing program.	5	$543	5	$536	5	$443
	(5)	(541)	(5)	(536)	(5)	(443)
Information products and services: 1/						
Information clearinghouse program (sales receipts). . .	384	30,914	384	35,000	379	36,639
	(342)	(32,628)	(384)	(33,703)	(373)	(36,639)
Total, NTIS.	389	31,457	389	35,536	384	37,082
	(347)	(33,169)	(389)	(34,239)	(378)	(37,082)

1/ Matched by offsetting receipts.

NOTE: Numbers not in parenthesis are permanent positions and budget authority. Numbers in parenthesis are total FTE and obligations.

The following table indicates the uses and significant workload indicators for FY 1984-1987:

Summary of Workload and Performance Data

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Information Clearinghouse Program:				
Technical documents catalogued and indexed	71,587	70,211	70,000	70,000
Subscriptions and newsletters:				
Published searches accomplished	2,500	2,500	2,500	2,500
Published searches sold	27,651	30,983	30,000	31,000
Specialized subscriptions	11,459	11,719	11,400	11,500
Abstract newsletters	11,023	10,348	11,500	12,500
Government reports announcements and index (GRA&I)	1,485	1,382	1,300	1,300
Technology notes	4,296	3,878	4,400	5,000
Copies of documents sold:				
Paperbound demand	493,190	457,654	450,000	455,000
Microfiche demand	158,941	156,368	128,500	110,000
Selected research in microfiche	2,334,993	1,939,688	1,900,000	1,950,000
Data bases offered	14	10	12	14
Data files offered	1,100	1,200	1,300	1,400
Software programs offered	1,200	1,275	1,300	1,350
Data base users	12,000	15,000	16,000	17,000
Government-to-Government quid pro quo agreements	25	30	35	39
Documents translated	20	4	4	...
Document distribution to developing countries	35,000	37,000	41,000	43,000
Developing countries visited	19	20	20	20

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Object class		1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp.
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
11	Personnel compensation:										
11.1	Full-time permanent appointments.	618	572	$19,570	567	539	$18,787	-51	-33	-$783	525
11.3	Other than full-time permanent appointments	37	46	623	37	46	623	...	...	...	31
11.5	Other personnel compensation.	...	...	268	...	...	268	...	...	...	...
	Total	655	618	20,461	604	585	19,678	-51	-33	-783	556
	Other objects:										
12.1	Personnel benefits.			2,118			2,036			-82	
13.0	Benefits for former personnel			...			600			+600	
21.0	Travel and transportation of persons. . .			231			226			-5	
22.0	Transportation of things.			6			4			-2	
23.1	Standard level user charges			2,340			2,273			-67	
23.3	Communications, utilities, and miscellaneous charges.			1,004			993			-11	
24.0	Printing and reproduction			816			800			-16	
25.0	Other services.			3,473			3,921			+448	
26.0	Supplies and materials.			300			290			-10	
31.0	Equipment			199			184			-15	
	Total, requirements			30,948			31,005			+57	

Justification by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Object class	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp.
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
11.1 Full-time permanent appointments										
Executive level	2	2	$132	2	2	$132	...	...	$...	2
Senior Executive Service	27	26	1,558	23	23	1,434	-4	-3	-124	23
General schedule	589	544	17,880	542	514	17,221	-47	-30	-659	500
Total, full-time permanent positions	618	572	19,570	567	539	18,787	-51	-33	-783	525
11.3 Other than full-time permanent appointments	37	46	623	37	46	623	...	...	...	31
11.5 Other personnel compensation										
Overtime			145			145			...	
SES performance awards			62			62			...	
Cash awards			33			33			...	
Other			28			28			...	
Total, other personnel compensation			268			268			...	
12.1 Personnel benefits										
Civil Service Retirement			1,255			1,204			-51	
Federal Insurance Contribution Act (FICA)			346			333			-13	
Health insurance			423			405			-18	
Employees' Compensation Fund			28			28			...	
Life insurance			66			66			...	
Total, personnel benefits			2,118			2,036			-82	
13.0 Benefits for former personnel										
Severance pay			...			600			+600	

Object class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc.(+) or Dec.(-) Pos.	Inc.(+) or Dec.(-) Workyears	Inc.(+) or Dec.(-) Amount
21.0 Travel and transportation of persons									
Per diem.			$122			$120			-$2
Air fare.			107			104			-3
Other			2			2			...
Total, travel and transportation of persons.			231			226			-5
22.0 Transportation of things.			6			4			-2
23.1 Standard level user charges			2,340			2,273			-67
23.3 Communications, utilities, and miscellaneous charges									
Federal telecommunications system			114			114			...
Other telephone, telegraph, and teletype services.			136			129			-7
Postal service by USPS.			96			96			...
Rental of automatic data processing equipment			495			491			-4
Rental of office copying equipment.			52			52			...
Other equipment rental.			19			19			...
Other space services.			92			92			...
Total, communications, utilities, and other rent			1,004			993			-11
24.0 Printing and reproduction									
Publications.			593			578			-15
Public use forms.			79			79			...
Envelopes			7			7			...
Other printing and reproduction			137			136			-1
(Payments to the GA, WCF)			(165)			(165)			(...)
Total, printing and reproduction.			816			800			-16

Object class	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)		
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
25.0 Other services									
Training:									
University.			$36			$36			$...
Office of Personnel Management.			12			12			...
Other			14			14			...
Maintenance of equipment.			36			34			-2
GSA reimbursable services			119			119			...
Payments to the GA, WCF			1,623			1,593			-30
Other Federal Agencies:									
Department of Agriculture			13			13			...
Department of Commerce.			67			64			-3
Department of Energy.			2			2			...
General Services Administration			2			2			...
Department of the Treasury.			780			1,530			750
National Institutes of Health			145			145			...
Other non-government contracts.			606			339			-267
Other non-government data purchases			18			18			...
Total, other services			3,473			3,921			+448
26.0 Supplies and materials									
Office supplies			106			101			-5
ADP supplies.			132			131			-1
Subscriptions and publications.			20			19			-1
Other specialized supplies and materials. .			42			39			-3
Total, supplies and materials			300			290			-10
31.0 Equipment									
Office machines and equipment			199			184			-15

Economic and Statistical Analysis
Salaries and expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
Consulting services	$5	$38	$40
Management and professional services	143	145	130
Special studies and analysis	23	60	50
Management and support services for research and development	...	...	...
Total	171	243	220
Amount withheld from obligation pursuant to P.L. 99-190	...	-24	...
Total	171	219	220

Consulting services, management and professional services, and special studies and analyses are utilized to the extent that they provide a cost-effective source for special services where the cost of permanent employment or other substitutes would be higher.

Further, it is not practical for ESA to conduct its work in an insulated environment. Consulting and related services contribute to the overall stability of ESA's work by: (1) providing cross-checks to ESA's work; and (2) supplementing staff to investigate important issues or problems.

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	$267	$279	$281	$296
Pamphlets	3	4	12	6
Audiovisuals	3	2	2	...
Total	273	285	295	302

Bureau of Economic Analysis

This activity provides a clear picture of the U.S. economy through the preparation, development, and interpretation of the national income and product accounts, summarized by the gross national product (GNP); the wealth accounts, which show the business and other components of national wealth; the input-output accounts, which trace the interrelationships among industrial markets; personal income and related economic series by geographic area; the U.S. balance of payments accounts and associated foreign investment accounts; and measures relating to environmental change within the framework of the national economic accounts. The work on the national economic accounts is supplemented by the preparation and analysis of other measures of business activity, including various tools for forecasting economic developments, such as surveys of investment outlays and plans of U.S. business, econometric models of the U.S. economy, and a system of leading, coincident, and lagging economic indicators. The data and analyses prepared by this activity are disseminated mainly through its monthly publications, the Survey of Current Business, including periodic supplements to the Survey, and Business Conditions Digest.

Businesss Analysis

This subactivity consists of the functions formerly prepared by the Bureau of Industrial Economics which continue to be performed by this appropriation. Among this subactivity's responsibilities are (1) analyses of the cross-industry effects of macroeconomic developments, trends, proposed and current policies, and unique events, e.g., supply interruptions, strikes, natural disasters; (2) assessments of the impact of selected regulations and legislation on the business community; and (3) microeconomic research and data base development on industrial energy, price, labor, and capital productivity trends.

The Bureau of Industrial Economics was transferred in FY 1984 to the International Trade Administration within the Department of Commerce. Information concerning program activities is reflected in the budget justification for that organization.

OPENING STATEMENT

Mr. SMITH. Go ahead, Mr. Merrifield.

Mr. MERRIFIELD. Mr. Chairman, I would like to suggest that I enter my prepared statement in the record and then just comment briefly.

Mr. SMITH. All right.

Mr. MERRIFIELD. I have brought several of my staff with me to answer any detailed questions you might have. Jack Keane and his staff will present the Census budget.

In brief, the prepared statement, details the 1987 request for the Economic and Statistical Analysis activities. In addition, we propose to eliminate the Productivity, Technology, and Innovation programs. I will be happy to answer any questions.

[The statement and biographical sketch of Mr. Merrifield follow:]

STATEMENT BY ACTING UNDER SECRETARY FOR ECONOMIC AFFAIRS
D. BRUCE MERRIFIELD
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON
THE DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE,
THE JUDICIARY, AND RELATED AGENCIES

Mr. Chairman and Members of the Committee:

OPENING REMARKS

I am pleased to appear before you today to present the 1987 budget request. Initially, I will discuss the request for the Economic and Statistical Analysis (ESA) account. I have brought several of my staff with me to answer any detailed questions that you might have. Later this afternoon, Jack Keane and his staff will present the Census request.

The 1987 request would provide $31 million for the ESA Salaries and Expenses appropriation. This is a net increase of $505 thousand from the 1986 budget. This net increase consists of an increase of $448 thousand for adjustments to base and built-in changes, an increase of $750 thousand for the improvements in the annual tabulations of corporate tax return data, less $693 thousand for the elimination of all Productivity, technology, and innovation programs beginning January 1, 1987 and scheduled for completion by September 30, 1987.

IMPROVEMENTS IN THE ANNUAL TABULATIONS OF CORPORATE TAX RETURN DATA

The increase of $750 thousand would provide funds for improvements in the annual tabulations of corporate tax return data. These tabulations are essential for BEA's preparation of the GNP estimates. They are the major source for components of the GNP accounts that in 1981 accounted for about $490 billion of GNP, about $164 billion of personal income, and about $66 billion of Federal Government receipts. The increase would provide for needed improvements in: (1) the size of the sample used to prepare these tabulations, (2) the amount of statistical editing, and (3) the timeliness of data received.

PRODUCTIVITY, TECHNOLOGY, AND INNOVATION PROGRAM

We also are proposing to terminate an activity that is largely complete and can now be left to the private sector or other units of Government. The productivity, technology, and innovation activity, consists of the Productivity, Technology, and Innovation and the Strategic Resources programs.

The work of the Productivity, Technology, and Innovation (PTI) program is being terminated since it has successfully completed its major tasks. For example:

By the passage of the National Cooperative Research Act of 1984, a major antitrust barrier to cooperation in R&D among U.S. companies has been removed.

PTI's Industrial Technology Partnerships program has helped to stimulate over $3 billion of private sector R&D financing through the use of research and development limited partnerships (RDLPs) in the last several years.

PTI's Federal Technology Policy program succeeded in drafting and obtaining approval of a Presidential Memorandum that makes contractor ownership of inventions Government-wide policy. Provisions were included in P.L. 98-620, to extend the principle of a contractor ownership to some of the largest Government-owned, contractor-operated laboratories. Legislation has been drafted which would increase private sector collaboration with our Federally owned and operated laboratories.

There are numerous other accomplishments for this Program within the small business, metric, and productivity areas. It is because of these accomplishments and increased private sector effort that we are able to propose this budget reduction.

In FY 1988, a small executive staff may be retained to continue to serve as the Department's focal point for strengthening the contribution of technological innovation to U.S. competitiveness, economic growth, and new job formation. Future activities expected to continue within the resources would be to serve as the Department's focal point and advocate on policy matters involving productivity, technology, and innovation, and domestic and international cooperative R&D ventures.

That concludes my statement, Mr. Chairman. My colleagues and I shall be happy to try to answer any questions you might have.

Biography

D. Bruce Merrifield

Dr. D. Bruce Merrifield is a graduate of Princeton University and holds Masters and Doctoral degrees in Physical Organic Chemistry from the University of Chicago.

Dr. Merrifield has since been in research, research administration, and new venture management and is currently Assistant Secretary of Commerce for Productivity, Technology, and Innovation. Formerly, he was Vice President of Technology and Venture Management for the Continental Group.

He is a former Director and president-elect of The Industrial Research Institute, and is both a former Trustee of the American Management Association and Chairman of its Research Council. Currently, he is a member of the Directors of Industrial Research, a member of Sigma XI Honorary Society, and is a Fellow of both The American Association for Advancement of Science and of the Institute of Chemists.

Dr. Merrifield also has been a member of the Advisory Board for the Binational Research and Development Foundation with Israel and of the U.S. Department of Commerce's Trade Mission to the People's Republic of China. He has served as Science Advisor to the Jordanian government and is a member of the Visiting Committee for Research at MIT and at Boston University.

Dr. Merrifield also has been active in community affairs as a former Chairman of the Board of Education, a Trustee of several schools, as National Chairman of the Princeton Alumni Association, a board member of several foundations, and a member of the Executive Council of the Episcopal Church.

SEQUESTRATION OF FUNDS

Mr. Smith. What effect has the sequestration of $1,312,000 had on you?

Mr. Merrifield. Basically, it does not require elimination of programs, furloughing of people, or RIFing of people. We have been able to accomplish the reduction through a hiring freeze, and through cutbacks in travel, training, contracts, printing, supplies, and equipment purchases.

Mr. Smith. Most of those things you mentioned are just delaying expenses. They are not permanent savings.

Mr. Merrifield. Well, no. Most of them are basic cutbacks in those activities, and therefore are not necessarily temporary.

Mr. Smith. Did you ask that they be restored? Did you cut your request for 1987 by that amount, or did you ask that those activities be restored?

Mr. Jackson. We didn't ask for those particular activities to be restored in 1987. That is an across-the-board type of cut. The hiring freeze is across the board. There was one exception to that, and that was a reprogramming that we wanted to do. That has been forwarded to OMB. It is a reprogramming of some $287,000. It was originally intended for the CUFT program. That is before OMB. That is going to be forwarded to you.

Mr. Smith. When?

Mr. Jackson. That is to offset some of the reductions that we incurred in the Gramm-Rudman cuts.

Mr. Smith. So you are taking them out of different areas?

Mr. Jackson. Yes.

REPROGRAMMING REQUEST

Mr. Smith. What do you propose to reprogram out of?

Mr. Merrifield. There was an add-on to the Center for Utilization of Federal Technology, the CUFT program to train people in the federal labs to identify commercially viable technology and to help them license that technology. What we propose to do is to use internal capabilities to do that and therefore reprogram that money into the Bureau of Economic Analysis for the GNP activities.

Mr. Smith. So your reprogramming request is out of things that the Committee either restored or added on?

Mr. Merrifield. That is correct.

Mr. Smith. Nothing out of what you would ask for originally?

Mr. Merrifield. That is correct.

Mr. Smith. You don't expect that kind of reprogramming to be approved, do you?

Mr. Merrifield. That is the proposal.

Mr. Smith. It seems to me if you have got a problem you ought to expect a little pain all the way around and not just pick out the things that Congress added on.

Mr. Merrifield. The approach here is that we can do that add-on for training with internal capabilities. We are also working, of course, with the Office of Personnel Management to get them to help us in supplying that training function, and so we feel that we can do that with internal capabilities rather than an add-on capability.

Mr. **Smith.** We don't like to see RIFs or furloughs. We are not about to sit here and reprogram out of restorations and add-ons, whether it causes furloughs and RIFs or not. I think you had better prepare yourself with some alternative reprogramming that spreads the pain a little bit.

IMPROVEMENTS IN CORPORATE TAX RETURN DATA

You are proposing an increase of $750,000 for reimbursing Internal Revenue for improvements in their annual tabulations of the corporate tax return data. Why do you pay for that? Why does Commerce Department pay for it?

Mr. **Merrifield.** Basically, the IRS mission is to supply its own data base, and the idea is that for those agencies that require additional information, IRS will supply it, but at cost, and the data that we are asking for is important to GNP and other data that we gather and are widely used, but that is not IRS' mission, and therefore the proposal is to reimburse them for that informtion that we do need.

MANAGEMENT SAVINGS

Mr. **Smith.** Then you are requesting a decrease from management savings of $150,000 which is related to reducing the costs of positions in grades 11 through 15. How many positions does this actually affect?

Mr. **Young.** I think we need to supply that for the record.

Mr. **Smith.** I guess the question really is how can you put a dollar figure on it? It depends on which people are reduced. How can you put a figure on reducing levels?

Mr. **Jackson.** I think we will probably have to send you something for the record on that.

[The information follows:]

FY 1987 is the third year of a five-year program to reduce the number of positions in grades 11 through 15 throughout the Federal Government. The total reduction in dollars to be achieved each year was prescribed by OMB and was based on salary costs for the GS-11-15 positions included in the FY 1983 budget. The total number of positions in each grade was multiplied by the salary of the fourth step of each grade to provide the salary base. The amount of the reduction for ESA in FY 1987 is $150,000.

GS 11-15 GRADE REDUCTION

Mr. **Smith.** Did you just pick a number out of the air?

Mr. **Jackson.** No, I don't think it is just picking out a number. I think the number represents not just a reduction, overall reduction in those particular grade levels, but a number of things that go into that.

Mr. **Smith.** Do you think that is a fairly solid number?

Mr. **Jackson.** I think it is.

CENTER FOR UTILIZATION OF FEDERAL TECHNOLOGY

Mr. Smith. How are you coming along with contracting out of training facilities related to the Center for Utilization of Federal Technology?

Mr. Merrifield. This refers back to the reprogramming request we have pending at OMB, we are proposing to use internal capability to train staff at the Federal labs and reprogram the money into the Bureau of Economic Analysis for the GNP activities.

GS 11–15 GRADE REDUCTION

Mr. Smith. Back to the other question I had about reducing those grade levels. Have you actually made savings in 1986?

Mr. Jackson. I would think there has been some overall reduction in the grade level. For instance, in 1985, back as far as 1985, the average grade level was 9.3. In 1986 the average grade level was again 9.3, and in 1987 we intend reductions to be 9.2. That is an overall reduction in the grade average which would, in a sense, necessitate some reduction in those particular grade levels.

Mr. Smith. Which particular grade levels are you reducing?

Mr. Jackson. Those between GS–11 and GS–15.

Mr. Smith. Mostly 11s, 12s, 13s, and 14s. Have any of those levels increased?

Mr. Jackson. I don't have that particular information with me at this particular time, but judging from the overall grade average, and judging from the fact that it has not increased to any significant size, I would think that has not increased.

Mr. Smith. You could have an increase in Grade 13, for example, and a reduction in all the others. Has that occurred?

Mr. Jackson. I don't have that information.

Mr. Merrifield. We can get that.

Mr. Jackson. We can get that for you for the record.

[The information follows:]

The following table shows changes in employment in Grades 11-15 since the beginning of the reduction effort.

COMPARISON OF FY 1985 AND 1986 GS–11 THROUGH 15 ACTUAL POSITIONS

	1985 initial estimate	1985 actual on-board	Change		1986 on-board as of 12/31/85	Change	
			Amount	Percent		Amount	Percent
GS–15	76	71	–5	–6.6	71	0	0.0
GS–14	87	82	–5	–5.7	85	3	3.7
GS–13	102	77	–25	–24.5	69	–8	–10.4
GS–12	124	121	–3	–2.4	123	2	1.7
GS–11	76	60	–16	–21.1	56	–4	–6.7
Total	465	411	–54	–11.6	404	–7	–1.7

IRS REIMBURSEMENTS

Mr. Smith. You have several items funded for the IRS in this budget, don't you?

Mr. Jackson. The $750,000 was the only one that we have.

Mr. SMITH. That includes all of the IRS?

Mr. JACKSON. That is all of the IRS.

Mr. YOUNG. We currently reimburse IRS for noncorporate data that we use at BEA, and this request for new funds is to reimburse IRS for corporate information. The noncorporate is about $500,000 for which we are reimbursing them, and we have found it necessary to ask for funds to improve the corporate information.

Mr. SMITH. Why haven't you gotten this corporate information before? Has there been any change in the law? why do you need it?

Mr. YOUNG. Over time, because of the main interest in Treasury for the IRS statistics to support the tax analysis function, the resources they have devoted to the information we need have decreased, and about three years ago a procedure was set up in which we would reimburse them for the noncorporate information, and at this point we feel that to maintain the quality of the corporate information in the GNP accounts we need to reimburse them, so they can do additional work in the corporate area.

Mr. SMITH. Are you saying that at one time you did get this information without paying for it?

Mr. YOUNG. Yes. But as the need for more information to support the tax analysis function at Treasury has grown, the quality of what is available to us has gone down.

Mr. SMITH. Does it cost them more to get this additional information?

Mr. YOUNG. Yes.

Mr. SMITH. Why would that be?

Mr. YOUNG. Over time they have cut resources in the statistics that we need for the GNP accounts in order to have resources for special studies and develop information that is needed to support tax analysis.

Mr. SMITH. Is it just a matter of programming, though?

Mr. YOUNG. They have had the need to program their funds into supporting tax analysis, and that has worked—

Mr. SMITH. Isn't it just a matter of writing a computer program to get this additional information out?

Mr. YOUNG. No. It is a matter of increasing the sample, the number of returns in the sample that they prepare statistical information from, and putting more resources into the statistical editing.

Mr. SMITH. To get the information that you want, do they have to have more returns in their sample?

Mr. YOUNG. They have reduced the size in order to free up resources for tax analysis.

Mr. SMITH. You are asking them to increase the size?

Mr. YOUNG. We are asking them to restore the size of the sample, to restore the amount of resources—this includes people that are doing editing of the information—and to restore the preliminary tabulations that would give us the information earlier than what we get with their current tabulations.

ELIMINATION OF OFFICE OF PRODUCTIVITY, TECHNOLOGY, AND INNOVATION

Mr. SMITH. You are proposing to eliminate the Office of Productivity, Technology, and Innovation in 1987. What benefits have been provided as a result of funding this activity in the last three years, for example?

Mr. MERRIFIELD. Basically, the charter for the Office of Productivity, Technology, and Innovation has been to remove barriers to innovation and to increase productivity and to provide incentives for increased activity of that sort, and to catalyze collaborative efforts in the private sector that would generate next generation technology and maintain our technical and industrial leadership.

Basically, we have gone after those things that we felt would, if successful, make a significant difference. One of these was the antitrust laws and the National Cooperative Research Act of 1984 which modified those laws, and the result of that has been that there are about 40 major consortia now that have formed and registered with Justice in developing a vast technology base and more all the time. We have gone after another major barrier, which was the authorization of government laboratories for the first time to license their technology to the private sector.

In the past, only about 4 percent of 28,000 government inventions have ever been licensed. We spend about $55 billion a year in federal technology, much of which has significant commercial potential. That barrier now, through the Acts of 1980 and 1984 and the current bill which hopefully will go through the Senate soon, will release literally tens of billions of dollars, and provide incentives for the government laboratories and the inventors to effect the translation of their technology into the private sector, so that is another major step.

We have developed the R&D limited partnership concept, which has generated about $3 billion now of private sector funding for R&D based on a 1954 tax law that has been around for a long time. That has had a major effect, particularly for small businesses. We have also developed the binational industrial research and development relationships between the United States and other countries. We are currently discussing these with about 35 countries. France has just come on board. India and Israel are the other two so far, and there are quite a few more that are surfacing quickly now. The idea here is to promote collaborative efforts between the United States and foreign nation companies to develop new technology and provide access for small- and medium-sized companies in this country to foreign markets and international trade.

There are a number of other things, such as the National Technology Medal, and so forth, that we have implemented, and we feel now that those initiatives have been successful, and the office has basically performed its function, and the Administration proposes now that it be eliminated.

CONCLUSION OF ACTIVITIES

Mr. SMITH. You mean all these things are concluded now and you don't need this kind of activity in the future; is that what you are saying?

Productivity, Technology, and Innovation

This activity is responsible for stimulating U.S. private sector productivity, international competitiveness, economic security, and growth. Among this activity's responsibilities are (1) encouraging the formation of Industrial Technology Partnerships and binational technology joint ventures designed to achieve major advances in technology and innovation; (2) identifying and removing Governmental barriers to and providing incentives for productivity growth and international competitiveness; (3) disseminating productivity know-how to business; and (4) coordinating the formulation and implementation of policies for technology transfer, patent policy, and metric conversion.

Average Grade and Salaries

Appropriation: Salaries and expenses

	1985 Actual	1986 Estimate	1987 Estimate
Average ES salary	$68,244	$68,244	$68,406
Average GS grade	9.31	9.31	9.25
Average GS salary	29,796	29,796	29,583
Average salary of ungraded positions	18,710	18,710	18,710

Mr. Merrifield. Well, it is a matter of value judgments, of course. There are a lot of things that are desirable, and the value of those relative to other things is the decision point. The Administration feels that there are other things that perhaps have a higher value now, and that the major purposes of this office have been completed.

Mr. Smith. Are you going to have these negotiations you spoke of concluded by the end of the fiscal year?

Mr. Merrifield. Nothing is ever concluded, but major efforts have been put in motion. Hopefully, some of those will continue. The model has been established, and the initiatives have been taken. To some degree the residual needs will, hopefully, be picked up in other ways, in other existing organizations.

Mr. Smith. Was this your recommendation to OMB originally?

Mr. Merrifield. This is the Administration recommendation.

Mr. Smith. I know, but my question was, did you recommend this to OMB or did they take it out?

Mr. Merrifield. I was not part of the decision personally.

Mr. Brown. Mr. Chairman, OMB took it out.

Mr. Smith. How many positions are associated with eliminating this?

Mr. Merrifield. Thirty-three FTE.

Mr. Smith. What would happen to these people?

Mr. Merrifield. Basically, they would be RIFed, and residual functions picked up elsewhere.

Mr. Smith. They wouldn't be sent to other departments?

Mr. Merrifield. To the degree that individuals have seniority and would be retained, they would move but they would bump other people in the process.

SMALL BUSINESS PROGRAM

Mr. Smith. The small business component of this office we have just been talking about; what about that?

Mr. Merrifield. We have had a rather active program in small business activities. We generate state and local profiles of industrial operations. Of course, you know we basically have a bottom up entrepreneurial revolution going on in this country. There are 670,000 companies that were formed last year.

Ninety percent of the jobs that have been created in the last three years have been in these small businesses. It is a very active program, and basically we have created a historically unprecedented climate now in the United States for entrepreneurial activity. It is a rather striking thing.

Again, hopefully, if the Small Business Administration is transferred to Commerce, it could pick up some of those initiatives.

Mr. Smith. So you are proposing to eliminate that, too?

Mr. Merrifield. That is correct.

Mr. Smith. I happen to have been the original sponsor of that bill, and I think it is working well. I just visited a facility last weekend where there were just two or three people. If somebody wants something, they tell them what they want and they will invent it. I think we have missed these things over the years. It is big business now that is going to go to them to get what they want, because they are not getting it out of big business.

Mr. **Merrifield**. That is exactly right. In fact, one of the things we have been encouraging is the big businesses to take minor equity positions in these small businesses, and provide the growth capital that they need, and this is quite an active program now. Innovation does occur in these small businesses, and their biggest problem is the growth capital that they need to continue to survive.

Mr. **Smith**. Some of that is done through incubators. At least we have to have the encouragement to help them protect themselves. That gives them the incentive. I don't see how you are going to do that in any other way. What is the substitute for it?

R&D LIMITED PARTNERSHIP PROGRAM

Mr. **Merrifield**. Basically, this is why the R&D limited partnership program has been effective. It supplied capital to the development process for these small businesses, and about 80 percent of the $3 billion that has been funded has gone into these small businesses. Of course, at the point of commercialization, venture capital becomes available, so they are very complementary. About $25 billion in venture capital has been raised in the last period of years since 1979 when the first reduction in capital gains taxes was put into effect, and about $30 billion of initial public stock offerings have taken place in the last few years, so there is a very interesting and very vital, very dynamic process going on here, and it is basic to the health of our economy. I couldn't agree more with you.

RESOURCES FOR THE SMALL BUSINESS COMPONENT

Mr. **Smith**. How much is involved in the small business component of this? How many dollars?

Mr. **Merrifield**. Basically, we operate a matrix operation, which involves a host of skills part time. We have developed computer simulation techniques and a constraint analysis that allows selection or identification of technology that has a high probability of commercial success. It gets eight or nine out of 10 successes instead of the normal one out of 10.

We have been bringing people in to train them in these things. This is what we are going to do at the Federal laboratory as well, to get these programs started, these small businesses started, but it is sort of, to answer your question, a little hard to say what the total increment is that is directed towards small business, but it is significant.

Mr. **Smith**. I guess any other questions we will ask you for the record.

Mr. **Merrifield**. Thank you.

WEDNESDAY, MARCH 19, 1986.

ECONOMIC DEVELOPMENT ADMINISTRATION

WITNESSES

ORSON G. SWINDLE, III, ASSISTANT SECRETARY OF COMMERCE FOR ECONOMIC DEVELOPMENT

WILLIAM F. DOHR, DEPUTY ASSISTANT SECRETARY FOR OPERATIONS

MICHAEL OBERLITNER, ACTING DEPUTY ASSISTANT SECRETARY FOR FINANCE

EUGENIE FOSTER, ACTING CHIEF COUNSEL

BRIAN WHALEN, DIRECTOR OF MANAGEMENT AND ADMINISTRATION

VINCE GOODMAN, BUDGET OFFICER

STEVE BRENNEN, DIRECTOR OF CONGRESSIONAL RELATIONS

Mr. SMITH. This morning, we have the 1987 budget request for EDA, as well as proposals for rescission of 1986 funds, and the deferral and transfer of some other $40 million.

Here to testify is the newly appointed Assistant Secretary for EDA, Orson Swindle.

Since this is your first appearance, we will put your biographical sketch into the record.

[The biography of Mr. Swindle and the justifications follow:]

BIOGRAPHY

ORSON G. SWINDLE, III

ASSISTANT SECRETARY OF COMMERCE FOR ECONOMIC DEVELOPMENT
U.S. DEPARTMENT OF COMMERCE

Orson G. Swindle, III, was nominated to be Assistant Secretary of Commerce for Economic Development by President Reagan on July 18, 1985, and confirmed by the United States Senate on November 6, 1985.

Swindle heads the Economic Development Administration which provides financial and technical assistance to promote commercial and industrial development in the country's economically distressed communities.

Swindle, the former Georgia State Director of the U.S. Department of Agriculture's Farmers Home Administration, previously served as a financial manager for the United States Marine Corps Logistics Base in Albany, Georgia.

Swindle served as a fighter pilot in the United States Marine Corps and was held prisoner of war in Vietnam for six years. Before retiring as Lieutenant Colonel, he obtained twenty personal decorations for valor including two Silver Stars, two Bronze Stars, two Legions of Merit, two Purple Hearts, thirteen Air Medals and the Navy Commendation Medal.

Born in Thomasville, Georgia, he graduated from the Georgia Institute of Technology (B.S. 1959) and Florida State University (M.B.A. 1975). He is married, has one son and maintains permanent residency in Camilla, Georgia.

DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION

Grants and Loans Administration
[Salaries and Expenses]

Budget Estimates, Fiscal Year 1987
Congressional Submission

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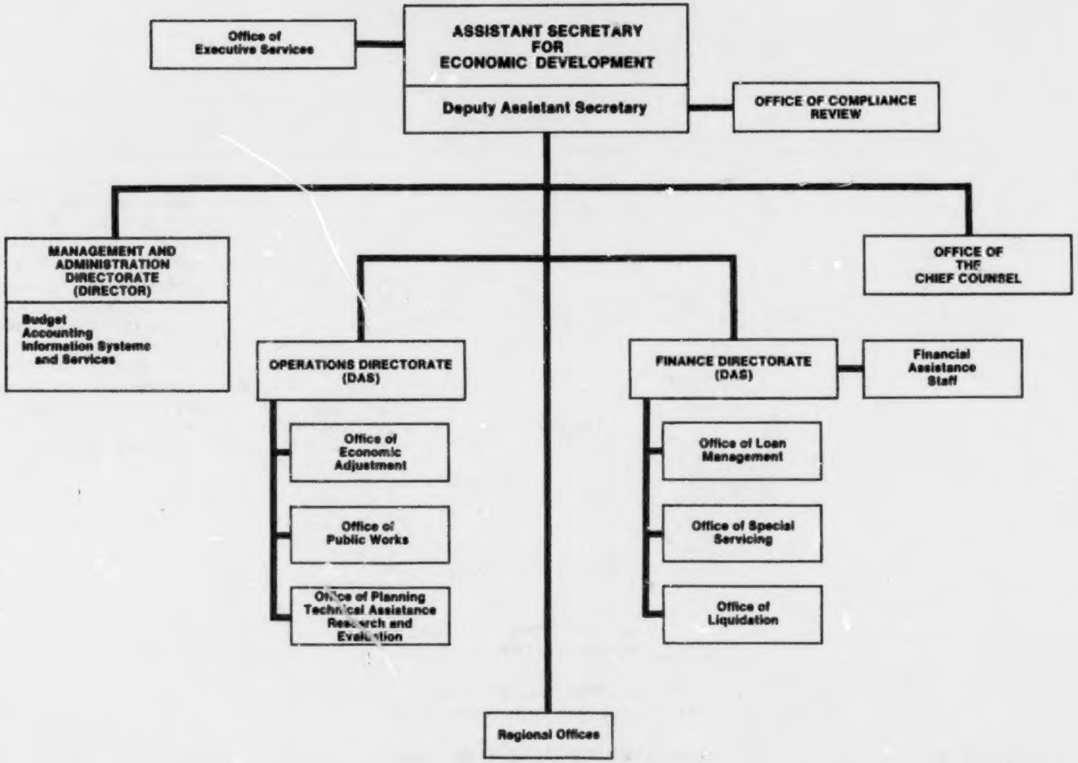
Congressional Submission
February, 1986

U.S. DEPARTMENT OF COMMERCE
Economic Development Administration


Office of Executive Services
ASSISTANT SECRETARY FOR ECONOMIC DEVELOPMENT
Deputy Assistant Secretary
OFFICE OF COMPLIANCE REVIEW
MANAGEMENT AND ADMINISTRATION DIRECTORATE (DIRECTOR)
Budget
Accounting
Information Systems and Services
OFFICE OF THE CHIEF COUNSEL
OPERATIONS DIRECTORATE (DAS)
FINANCE DIRECTORATE (DAS)
Financial Assistance Staff
Office of Economic Adjustment
Office of Public Works
Office of Planning Technical Assistance Research and Evaluation
Office of Loan Management
Office of Special Servicing
Office of Liquidation
Regional Offices

General Statement

This budget request presents the funding and staffing support needed to phase out the programs of the Economic Development Administration (EDA), trade adjustment assistance, public telecommunications and facilities projects, federal ship financing fund, and fisheries loan fund projects. The budget request covers all administrative support for the Agency's phaseout activities. The remaining EDA functions will be consolidated in the Office of the Secretary. An office of grants and loans administration will be established to monitor and close out existing grants, loans and loan guarantees under these programs.*

The programs of the Economic Development Administration were authorized by the Public Works and Economic Development Act of 1965 as amended, and the Trade Act of 1974 in order to provide grants, loans and loan guarantees to economically distressed areas. The Administration proposes to terminate EDA starting with a rescission in FY 1986.

The following is a comparison of the current FY 1986 level as appropriated and the request for FY 1987.

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc(+) or Dec(-)		Perm. Emp. 12/31
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Grants and loans administration [Salaries and expenses]..	400	$26,000	250	$21,591	-150	-$4,409	417
Economic development assistance programs.................	...	183,500	...	...	...	-183,500	...
Total..	400	209,500	250	21,591**	-150	-187,909	417

The President's FY 1987 Budget proposes termination of EDA programs for the following reasons:

1. Funding decisions for local economic development projects should be the responsibility of either state and local governments or private investors.
2. Decreasing unemployment reflects the success of the Administration's policies in relying on the private sector for job creation.
3. EDA's mandate to help distressed areas is undermined by the fact that more than 80 percent of U. S. counties are eligible for EDA assistance.
4. The Administration believes that EDA programs are a costly and inefficient means of creating jobs.

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* This submission describes existing EDA programs. Other programs proposed for consolidation into the Office of Grants and Loans Administration are described in the International Trade Administration, National Telecommunications and Information Administration and National Oceanic and Atmospheric Administration submissions.

** Funding to be derived from reappropriation of unobligated balances.

The amounts requested will provide necessary staffing for monitoring ongoing projects, for collecting debts owed to the Government, and for all other functions associated with an orderly phaseout of the Economic Development Administration and other Departmental programs proposed for termination. Employees responsible for initiating or coordinating new projects and programs will be released by December 31, 1986. Funding for these activities is to be derived from a reappropriation of unobligated 1986 funds to be transferred from "Economic development assistance programs." A total of $40,000,000 will be reappropriated to support closeout costs for FY 1987 - FY 1991.

A proposal to rescind $101,309,000 of the $183,500,000 FY 1986 appropriation is contained in the Administration's FY 1987 budget request. Currently, EDA has committed $34,300,000 of its FY 1986 economic development assistance programs funds. The rescission proposal includes all FY 1986 appropriated program funds other than the $34,300,000 already committed, the $40,000,000 which will be used to support close-out costs for FY 1987 - FY 1991, and the $7,891,000 Gramm-Rudman-Hollings reduction.

Appropriation Title and Language Change

Delete the heading, Economic Development Administration, appropriation title, "Salaries and expenses" and appropriation language and under the heading, General Administration, insert appropriation title, "Grants and loans administration".

This will change the account title from "Salaries and expenses" to "Grants and loans administration" and establish within the Office of the Secretary a new account, whose personnel will continue the phaseout of EDA and other grant and loan programs for which program funds are no longer appropriated.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Grants and loans administration [Salaries and expenses]

Page No:	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			400	$26,000
EDA- 7	Adjustments to base and built-in changes:				
	Transfer	-1	-$60		
	Other increases	...	+330		
	Subtotal, adjustments to base and built-in changes			-1	+270
	1987 Base			399	26,270

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Comparison by activity:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Economic development assistance programs (EDAP):										
EDA- 8	Planning, technical assistance, research and evaluation	62	$2,679	48	$2,453	48	$2,453	29	$1,660	-19	-$793
		(60)	(2,511)	(48)		(48)		(35)		(-13)	
EDA-11	Development grants	84	4,124	111	4,470	111	4,470	80	4,122	-31	-348
		(90)	(2,993)	(105)		(105)		(89)		(-16)	
EDA-14	Adjustment grants	7	237	7	217	7	217	7	217	...	...
		(13)	(291)	(13)		(13)		(13)		(...)	
EDA-16	Development loans and guarantees	55	2,824	49	2,586	49	2,586	46	2,511	-3	-75
		(59)	(2,643)	(49)		(49)		(48)		(-1)	

Comparison by activity (cont'd):

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
EDA-18	Direct supporting services....................	146 (150)	$6,915 (8,499)	122 (122)	$5,654	122 (122)	$5,654	51 (62)	$3,238	-71 (-60)	-$2,416
EDA-21	Executive direction...........................	67 (72)	10,841 (10,393)	63 (63)	10,620	62 (62)	10,890	37 (47)	9,843	-25 (-15)	-1,047
	Subtotal, EDAP......................	421 (444)	27,620 (27,330)	400 (400)	26,000 ...	399 (399)	26,270 ...	250 (294)	21,591	-149 (-105)	-4,679
EDA-24	Local public works............................	13 (14)	760 (760)	... (...)	...	... (...)	... ...	... (...)	...	... (...)	...
	Change..									-149 (-105)	-4,679
	Total requirements..........................	434 (458)	28,380 (28,090)	400 (400)	26,000	399 (399)	26,270	250 (294)	21,591		
	Financing from prior-year unobligated balances..	...	...	...	...	...	...	...	-21,591		
	Appropriation..............................	434	28,380	400	26,000	399	26,270	250	...		

NOTE - Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Justification of Adjustments to Base and Built-in Changes
(Dollar amounts in thousands)

	Perm. Pos.	Amount
Transfer:		
To "Salaries and expenses", General Administration	-1	-$60

The transfer was approved by Congress in May 1985. The transfer is part of a Departmental effort to consolidate personnel policy and operations into the Office of the Secretary. The action will provide a more economical, stable and better equipped workforce for personnel services for EDA.

	Perm. Pos.	Amount
Other increases:		
Rent payments to GSA	...	+171
Federal Telecommunications System (FTS)	...	+21
Other telephone, telegraph and teletype services	...	+7
Printing and reproduction	...	+3
Payments to Department of Labor for Employees' Compensation Fund	...	+21
Working Capital Fund	...	+106
Supplies and materials	...	+1
Total, other increases	...	+330

An increase of $171,000 is required to cover the rate increase of currently occupied space as determined by the General Services Administration.

An increase of $21,000 in Federal Telecommunications System charges is based on a distribution of rate and usage charges as determined by the General Service Administration.

An increase of $7,000 is required to cover the increased cost of commercial telephone rates as determined by a comparison of billings in FY 1986 versus FY 1985.

The cost of printing (both paper and labor) continues to increase. The increase of $3,000 is intended to offset a portion of the increase which occurred in the past year.

An increase of $21,000 for the Employees' Compensation Fund is the result of lower costs in the year ending June 30, 1985 than in the year ending June 30, 1984. The 1985 charges will be reimbursed to the Department of Labor, Employees' Compensation Fund, pursuant to Public Law 86-767, as amended.

An increase of $106,000 is requested for cost increases associated with the Department's Working Capital Fund.

An increase of $1,000 is required to cover the increased cost of supplies as determined by a comparison of billings in FY 1986 versus FY 1985.

Justification of Program and Performance

Activity: Economic development assistance programs

Subactivity: Planning, technical assistance, research and evaluation

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Planning	32	$1,340	23	$1,153	23	$1,153	14	$801	-9	-$352
	(31)	(1,241)	(23)		(23)		(16)		(-7)	
Technical assistance	23	938	19	981	19	981	12	687	-7	-294
	(22)	(869)	(19)		(19)		(15)		(-4)	
Research and evaluation	7	401	6	319	6	319	3	172	-3	-147
	(7)	(401)	(6)		(6)		(4)		(-2)	
Total requirements	62	2,679	48	2,453	48	2,453	29	1,660*	-19	-793
	(60)	(2,511)	(48)		(48)		(35)		(-13)	

*Funding to be derived from reappropriation of unobligated balances.

Goals and Objectives

Goals: Orderly phase out of planning and technical assistance grants and the completion of evaluations currently in process.

Objectives: To monitor the evolution of previously approved projects to ensure completion in accordance with conditions stated in the grants and in law. To assist the Inspector General's staff with audit closeouts.

Base Program

The Planning staff is responsible for program development and execution of EDA's economic development planning program. This staff manages the administration of all EDA planning grant programs including implementation of policies and procedures for developing, processing and monitoring planning grants to states, cities, districts, areas and Indian Tribes. In addition to periodic reviews to assure that basic requirements of the grants are being met, the Planning staff works with grantees to help them develop an ever stronger economic development process for their respective areas and to assure that the process continues to evolve.

The Technical Assistance staff formulates program policies and reviews applications from communities, non-profit organizations, state and local governments and other eligible applicants who are seeking to overcome specific economic development problems and are in need of technical assistance to ascertain the extent to which they meet EDA objectives. Their administrative functions include: (1) formulating overall program policies for the national technical assistance, university center, and other regional technical assistance programs; (2) developing, reviewing, and evaluating applications; (3) coordinating the technical assistance program throughout the Economic Development Administration and with other Federal agencies; (4) improving applications to meet EDA standards and enhance project benefits; (5) monitoring and evaluating grantee performance; and (6) appraising the effectiveness of technical assistance projects.

The Research and Evaluation staff conducts external and in-house research and analysis to be used for the following purposes: (1) increase the general understanding of regional and local development problems, and (2) promote the development of more effective programs and policies to deal with these programs. The external program consists of grants, interagency agreements or cooperative agreements with educational and other non-profit institutions, private businesses, and private individuals. In-house activities include research, review and dissemination, analyses conducted in conjunction with the contractual research program, and work performed to meet other EDA analytic needs. The program evaluation staff conducts activities which measure the performance of EDA's programs and thereby provide a basis for Federal, state and local governments and others involved in formulating or implementing economic development programs to increase their effectiveness in stimulating economic development in distressed areas.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Planning..	23 (23)	$1,153	14 (16)	$801	-9 (-7)	-$352
Technical assistance................................	19 (19)	981	12 (15)	687	7 (-4)	-294
Research and evaluation.............................	6 (6)	319	3 (4)	172	-3 (-2)	-147
Total requirements..............................	48 (48)	2,453	29 (35)	1,660	-19 (-13)	-793

Monitoring of planning and technical assistance grants will cease by the end of FY 1987 when it is anticipated that awards made during FY 1986 will expire. The research and evaluation staff will make available to other Federal agencies and to state and local governments results of studies, research, investigations, and projects that can be of use to public and private development organizations.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease
Personnel compensation	-19	-$770,000
Personnel benefits		-90,000
Less lapse		+213,000
Subtotal, personnel compensation and benefits		-647,000
Other services		-139,700
Supplies and materials		-3,300
Total		-793,000

Justification of Program and Performance

Activity: Economic development assistance
programs

Subactivity: Development grants

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Development grants..	84	$4,124	111	$4,470	111	$4,470	80	$4,122*	-31	-$348
	(90)	(2,993)	(105)		(105)		(89)		(-16)	

*Funding to be derived from reappropriation of unobligated balances.

Goals and Objectives

Goals: Orderly phase out of public works grants including those grants awarded under the Emergency Jobs Act of 1983 and Title I of the Public Works Employment Act of 1976.

Objectives: To monitor the evolution of previously approved projects to ensure completion in accordance with conditions stated in the grants and in law. To assist the Inspector General's staff with audit closeouts.

Base Program

The Development Grants staff recommends and uniformly implements policies, standards and procedures for accepting, processing, reviewing, approving and carrying out grant projects (which fund construction facilities for economic development) consistent with the procedures contained in the Public Works and Economic Development Act of 1965, as amended, Office of Management and Budget directives, Executive Orders, and pertinent laws, and maintains an operating liaison with other Federal agencies having programs which may supplement EDA projects and with those agencies delegated responsibility for administering or servicing EDA projects. This staff assures that approved projects support local development objectives and that they are implemented locally through effective management procedures.

The three work phases of the development grants program are: pre-application counseling, direct processing of applications, and project surveillance and implementation. Direct professional services are supported by technical supervision and program coordination.

Pre-application Counseling - Applicants are advised of what EDA expects from them and what they can expect from EDA. Staff services furnished to applicants include preliminary advice on project scope, engineering feasibility, program and statutory requirements, and financial considerations.

Direct processing - This activity is carried out principally by the Regional Offices. It is comprised of the three processing functions, listed below:

1. Program review - Each project is reviewed in terms of its expected economic impact on the area relative to the amount of Federal investment, the priority of the project relative to other specific needs of the community, state and region, and the willingness of local officials to organize the community for economic development.

2. Technical review - Projects are reviewed for financial and engineering feasibility. Engineers examine all projects to ensure that they meet engineering standards and are technically compatible with existing or planned public facilities.

3. Requirements and certification - Projects are reviewed for compliance with statutory requirements and EDA, Department of Commerce and OMB policies and regulations.

Project surveillance and implementation - These activities begin when the applicant has accepted the approved project and continues until the warranty on construction has expired. They are designed to protect the Federal and local governments' investments and interests in the project and to assure that economic development goals are met as soon as is practical. The staff monitors the construction, financial, administrative, and statutory aspects of each project on a continuing basis.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Development grants....................................	111 (105)	$4,470	80 (89)	$4,122	-31 (-16)	-$348

Government liability of all uncompleted public works projects is estimated to be in excess of $300 million at the end of FY 1987. The residual staff will continue on-site visits and review for claims to ensure that they comply with all legal and policy requirements and that project costs are realistic and properly computed. In addition, final assessments will be made of the local economic impact of such projects.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease
Personnel compensation	-31	-$1,200,000
Personnel benefits		-132,000
Less lapse		+575,000
Subtotal, personnel compensation and benefits		-757,000
Other services		+413,000
Supplies and materials		-4,000
Total		-348,000

Justification of Program and Performance

Activity: Economic development assistance
programs

Subactivity: Adjustment grants

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Adjustment grants..	7 (13)	$237 (291)	7 (13)	$217	7 (13)	$217	7 (13)	$217*	... (...)	...

*Funding to be derived from reappropriation of unobligated balances.

Goals and Objectives

Goals: Orderly phase out of economic adjustment including those grants used to capitalize revolving loan fund projects.

Objectives: To monitor the evolution of previously approved projects to ensure completion in accordance with conditions stated in the grants and in law. To assist the Inspector General's staff with audit closeouts.

Base Program

The Economic Adjustment Assistance Program is authorized by Title IX of PWEDA (Public Works and Economic Development Act of 1965, as amended). Its purpose is to help local areas develop and/or implement comprehensive adjustment strategies designed either to anticipate and prevent economic dislocation or to re-establish employment opportunities and economic stability as soon as possible after dislocation occurs.

The Adjustment Grants staff provides assistance to areas experiencing sudden dislocations to the local economy. Assistance is provided through grants to develop strategies for overcoming the dislocation or through implementation grants to carry out local strategies. In addition, 50% of funds appropriated are used for revolving loan fund grants. Development and processing grants entail three sub-categories of functions as follows:

1. Identifying requires a search for dislocation situations and responses to changes in economic trends or the specific appeals by local representatives.

2. Developing requires evaluation of the regional economic environment supporting potential applications, evaluation of prepared strategies to deal with dislocations, receipt and evaluation of profiles describing potential dislocations and pre-application decisions.

3. Processing requires evaluation of invited applications and the fulfillment of all legal and policy guidelines through final approval of the application.

Monitoring of Approved Projects - Monitoring includes financial and accounting functions, contract review, consultant approval, loan closings, study evaluation and any other such functions as may be required. Economic adjustment grants generally focus on specific problems and are completed in approximately three to four years. The remaining staff will coordinate the completion of those projects aligned with long-term economic development.

Justification of Program and Performance

Activity: Economic development assistance
Programs

Subactivity: Development loans and guarantees

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Development loans and guarantees..........................	55	$2,324	49	$2,586	49	$2,586	46	$2,511*	-3	-$75
	(59)	(2,643)	(49)		(49)		(48)		(-1)	

*Funding to be derived from reappropriation of unobligated balances.

Goals and Objectives

Goals: Protect Federal investments in the EDA direct loan and loan guarantee portfolio.

Objectives: To monitor the closeout of loans and to maximize timely collection of funds owed to the Federal Government.

Base Program

This staff conducts the Agency's development loan and loan guarantee programs by monitoring existing direct loans and loan guarantees and awarding new loan guarantees. It provides a full range of support for the program, including application development, evaluation and processing and all necessary guarantee administration or post-approval monitoring to assure that funds are used in such a way as to meet the economic development objectives of the project and to protect the Federal investment.

The responsibilities of the loan administration staffs include the development of applications for new loan guarantees, meeting with prospective applicants, and assisting in completing applications for loan guarantees. Applicants and prospective applicants for loan guarantees are informed of the financial, statutory, and policy requirements of the program and are provided overall assistance in developing an application which will be acceptable under the EDA loan guarantee program. Guarantee applications are evaluated to determine the reasonableness of the applicant's repayment ability, the permanency of the employment to be created with the guaranteed financing, availability of raw material, and the firm's operating history and management ability.

The staff monitors repayment of both direct loans and loan guarantees and assures that the borrower is complying with the loan and loan guarantee agreement. Effective loan servicing requires the early recognition of problems that exist with borrowers, the identification of the underlying causes of the problems, and the determination of appropriate solutions. Through field visits, monitoring of borrowers' repayment records, analyses of financial statements, discussions with borrowers, and evaluation of operating or financial problems, the staff seeks to protect the Government's interests in the projects.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Development loans and guarantees........................	49 (49)	$2,586	46 (48)	$2,511	-3 (-1)	-$75

Staff related to post-approval monitoring and debt collection will remain at the current level. Staff retention is necessary for the achievement of effective loan servicing and debt collection. The debt collection targets for FY 1986 and FY 1987 are $110 million and $90 million respectively. To facilitate collection and loan disposition, the Administration will proposed legislation to repeal the McDade Amendment as contained in the FY 1986 appropriation act that prohibits sale of such assets (loans) without the consent of the borrower.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease
Personnel compensation..	-3	-$120,000
Personnel benefits..		-13,000
Less lapse..		+59,000
Subtotal, personnel compensation and benefits..................		-74,000
Supplies and materials.......................................		-1,000
Total...		-75,000

Justification of Program and Performance

Activity: Economic development assistance programs

Subactivity: Direct supporting services

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Field direction	41	$2,144	31	$2,109	31	$2,109	25	$1,913	-6	-$196
	(40)	(3,001)	(31)		(31)		(30)		(-1)	
Economic development representatives	49	2,351	49	2,005	49	2,005	...	...	-49	-2,005
	(45)	(2,964)	(49)		(49)		(...)		(49)	
Chief counsel	26	1,383	14	700	14	700	8	550	-6	-150
	(34)	(1,333)	(14)		(14)		(10)		(-4)	
Compliance review	9	553	9	390	9	390	4	350	-5	-40
	(11)	(676)	(9)		(9)		(5)		(-4)	
Accounting	21	484	19	450	19	450	14	425	-5	-25
	(20)	(525)	(19)		(19)		(17)		(-2)	
Total requirements	146	6,915	122	5,654	122	5,654	51	3,238*	-71	-2,416
	(150)	(8,499)	(122)		(122)		(62)		(-60)	

*Funding to be derived from reappropriation of unobligated balances.

Goals and Objectives

Goals: To provide direct support services to program personnel involved in the phaseout of EDA programs.

Objective: To assure that program operations are provided effective support in all areas.

Base Program

This staff conducts the overall program administration of EDA including such activities as the Agency's relationship with the public, program support to the headquarters and Regional Offices, and operational guidance to the staffs of the planning, technical assistance, public works (development grants), adjustment, development finance, and research and evaluation programs.

1. Field Direction includes the six EDA Regional Office Directors and their supporting technical, administrative and clerical personnel. The Regional Directors are responsible for the implementation of EDA's program within specific geographical areas and assist in the management of resources and the processing, monitoring and servicing of projects.

2. Economic Development Representatives provide liaison between applicants, local government officials, local planning organizations, state agencies, and regional offices of other Federal agencies. Principal services provided by the Economic Development Representatives are: (1) informational assistance and preliminary technical support to the applicants in the preparation and submission of project applications, (2) assistance to local citizens and officials in the planning of economic development programs; and (3) establishment of and continuing services to Area and District planning organizations.

3. The Office of the Chief Counsel renders legal services to the Assistant Secretary and staff of EDA. It also has primary responsibility for the preparation, coordination and clearance of all legislation, regulations and external orders. Attorneys in the Office of the Chief Counsel and in the EDA Regional Offices review all projects for legal sufficiency and compliance with statutory requirements.

   After project approval, the Office of Chief Counsel insures compliance with the terms and conditions of EDA's awards of financial assistance and loan guarantees. The Office reviews and evaluates all proposed modifications and waivers of the terms of EDA's award documentation to determine whether the proposed changes conform to all statutory, regulatory and executive requirements. The Office of Chief Counsel determines whether said modifications require protection of the government's interests in property acquired and improved with Federal grant funds.

4. The Office of Compliance Review conducts environmental impact analyses for grants and loan guarantees and also conducts environmental reviews for a variety of public works and industrial/commercial projects to identify and resolve potential adverse environmental impacts. The staff is responsible for the implementation of programs and activities developed by EDA to insure non-discrimination and equality of opportunity in EDA's economic development programs. Civil Rights Specialists in this Office and in the Regional Offices conduct Title VI pre-approval reviews, construction pre-award determinations, post approval compliance reviews to monitor the employment practices of EDA's recipients and substantial beneficiaries, and investigates potential civil rights violations.

5. The Accounting Division provides accounting support to all phases of the Economic Development Administration, both programmatic and administrative. This includes billings, collections, inventory and reconciliation of payables and receivables.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Field direction	31 (31)	$2,109	25 (30)	$1,913	-6 (-1)	-$196
Economic development representatives	49 (49)	2,005	... (...)	...	-49 (-49)	-2,005
Chief counsel	14 (14)	700	8 (10)	550	-6 (-4)	-150
Compliance review	9 (9)	390	4 (5)	350	-5 (-4)	-40
Accounting	19 (19)	450	14 (17)	425	-5 (-2)	-25
Total requirements	122 (122)	5,654	51 (62)	3,238	-71 (-60)	-2,416

Remaining staff will provide support and guidance on the phaseout of EDA. This will include the legal termination of projects and the transfer of functions to other Federal agencies and to state and local governments. All Economic Development Representatives (EDR's) will be released by December 31, 1986.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease
Personnel compensation	-71	-$2,800,000
Personnel benefits		-312,000
Less lapse		+756,000
Subtotal, personnel compensation and benefits		-2,356,000
Other services		-50,000
Supplies and materials		-10,000
Total		-2,416,000

Justification of Program and Performance

Activity: Economic development assistance programs

Subactivity: Executive Direction

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Assistant Secretary for Economic Development and Deputy Assistant Secretaries....................	39	$1,950	35	$1,750	34	$1,725	21	$1,050	-13	-$675
	(30)	(1,765)	(35)		(34)		(26)		(-8)	
Management and Administration Directorate:										
Director..	4	180	4	185	4	185	3	140	-1	-45
	(4)	(180)	(4)		(4)		(3)		(-1)	
Personnel...	...	300	...	...	...	...	...	...	...	...
	(12)	(300)	(...)		(...)		(...)		(...)	
Information Systems and Services Division...........	20	920	20	950	20	950	10	650	-10	-300
	(22)	(920)	(20)		(20)		(15)		(-5)	
Budget..	4	190	4	200	4	200	3	150	-1	-50
	(4)	(190)	(4)		(4)		(3)		(-1)	
Centralized Agency Services.........................	...	7,301	...	7,535	...	7,830	...	7,853	...	+23
	(...)	(7,038)	(...)		(...)		(...)		(...)	
Total requirements...............................	67	10,841	63	10,620	62	10,890	37	9,843*	-25	-1,047
	(72)	(10,393)	(63)		(62)		(47)		(-15)	

*Funding to be derived from reappropriation of unobligated balances.

Goals and Objectives

Goals: To effectively manage the Agency consistent with the intent of Congress and as mandated in statute.

Objective: To provide essential policy guidance and management and administrative support to ensure an orderly phase out of EDA.

Base Program

This staff consists of the Assistant Secretary who directs the EDA programs and is responsible for the conduct of all activities, including overall direction and coordination of the regional offices of EDA, subject to the policies and directives prescribed by the Secretary of Commerce. The Deputy Assistant Secretary assists the Assistant Secretary in all matters affecting EDA and performs the duties of the Assistant Secretary during the latter's absence. The Office of Executive Services plans and conducts a program for achieving operational effectiveness and efficiency including staff support to the EDA Internal Control Coordinator in the monitoring of internal management control systems. The Office receives all correspondence addressed to the Assistant Secretary and assigns it to the appropriate office for action.

The Deputy Assistant Secretary for Operations provides coordinated direction of headquarters' activities related to financial (including public works loans) and technical assistance projects, which will improve local economies, and integrate EDA's investment and planning activities; develops, in conjunction with the Office of the Inspector General, criteria for audits, including adherence to EDA policy and programmatic requirements; and develops policies and procedures for the implementation of all EDA grants programs.

The Deputy Assistant Secretary for Finance provides coordinated direction of headquarters and regional activities related to EDA's direct loan and loan guarantee programs and develops policies and procedures for the administration of Section 202 of the Public Works and Economic Development Act of 1965, as amended.

The Management and Administration Directorate provides a full range of administrative services including affirmative action programs, budgeting and ADP support. In the event of a major RIF, the Director will also serve as the Agency personnel coordinator with the Department and the Union.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Assistant Secretary for Economic Development and Deputy Assistant Secretaries........................	34 (34)	$1,725	21 (26)	$1,050	-13 (-8)	-$675
Management and Administration Directorate:						
Director...	4 (4)	185	3 (3)	140	-1 (-1)	-45
Personnel..	... (...)	...	... (...)		... (...)	
Information Systems and Services Division..............	20 (20)	950	10 (15)	650	-10 (-5)	-300
Budget...	4 (4)	200	3 (3)	150	-1 (-1)	-50
Centralized Agency Services...........................	... (...)	7,830	... (...)	7,853	... (...)	+23
Total requirements................................	62 (62)	10,890	37 (47)	9,843	-25 (-15)	-1,047

EDA will retain staff to address Congressional and public concerns as well as internal administrative support in such areas as budgeting and management information systems. Severance pay for all employees released will be paid from the Centralized Agency Support line item in order to retain the integrity of ongoing operational costs.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease
Personnel compensation	-25	-$1,400,000
Other personnel compensation		-25,000
Personnel benefits		-150,000
Less lapse		+307,000
Subtotal, personnel compensation and benefits		-1,268,000
Benefits for former personnel		+3,590,000
Travel and transportation of persons		+113,000
Transportation of things		+70,000
Standard level user charges		-780,000
Communications, utilities and other rent		-310,000
Printing and reproduction		-28,000
Other services		-2,401,300
Supplies and materials		-7,700
Equipment		-25,000
Total		-1,047,000

Justification of Program and Performance

Activity: Local public works

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Revised Base		1987 Estimate		Inc(+) or Dec(-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Local public works....................................	13	$760	...	...	...	...	...	...	...	...
	(14)		(...)		(...)		(...)		(...)	

Goals and Objectives

Goals: Audit and close out previously approved projects.

Objectives: To assure completion of all active projects, close out previously approved projects, collect any dollar amounts owed to the Government and provide assistance as needed to the Inspector General's staff.

Base Program

Title I of the Public Works Employment Act of 1976, as amended, authorized funds for grants to States and local governments for public works projects. The program was implemented in 1977 and is substantially completed. The residual LPW staff was merged with the office of Public Works at the end of fiscal year 1985.

Mr. SMITH. You may proceed.

Mr. SWINDLE. Thank you, sir.

Mr. Chairman, I am pleased to be here today to discuss with you the fiscal year 1987 budget request for the Economic Development Administration, EDA. Before detailing the 1987 budget request, I would first like to summarize our 1985 and 1986 program operations.

FISCAL YEAR 1985 PROGRAM OPERATIONS

For 1985, EDA was appropriated $200 million in regular program funds and $150 million in authority to guarantee development loans by private lenders. Availability of grant funds and selection criteria were published in the Federal Register on October 9, 1984. By September 30, 1985, over 950 economic development grants had been awarded, valued at $199,957,000. In addition, four business loan guarantees were approved with a contingent liability of $11.9 million.

EDA increased its loan guarantee activity in 1985 while at the same time implementing the more stringent, government-wide requirements on credit assistance contained in the Office of Management and Budget Circular A-70. These new requirements focused on the need for the Federal Government to have liens equal to or better than those of any other lender, and for the borrower to contribute sufficient equity to the proposed project.

Credit standards will remain tight in 1986. Greater equity will be required of the borrower, and complete loan servicing will be the responsibility of the lender.

During 1985, EDA collected $103.6 million in debts owed to the Federal Government. This amount represents an increase of $1.1 million over the $102.5 million collected in 1984.

FISCAL YEAR 1986 PROGRAM OPERATIONS

For 1986, EDA was appropriated $183.5 million in program funds and loan guarantee authority of $150 million. Availability of these funds and project selection criteria were published in the Federal Register on January 23, 1986. The revised criteria was applied to the $34.3 million committed prior to the rescission proposal.

The program focus is somewhat more rurally oriented this year with a rural/urban funding split of 60 to 40. Urban projects still received appropriate consideration from available program funding. Also, program administrators were instructed to direct assistance to areas of high unemployment.

FISCAL YEAR 1986 AND 1987 BUDGET REQUESTS

The 1987 budget for the Economic Development Administration proposes the termination of all economic development assistance programs. This termination will begin with a rescission of fiscal year 1986 funds not already authorized for current or future use. Of the $183.5 million in program funds appropriated in fiscal year 1986, $34.3 million will be used to honor current commitments; $7.9 million will be applied to the Gramm-Rudman-Hollings reductions; $40 million will be proposed for reappropriation to fund phaseout activities for fiscal year 1987 through fiscal year 1991; and the remaining $101.3 million is proposed for rescission.

The 1987 budget request also proposes to rescind $119.3 million of EDA's 1986 loan guarantee authority. The proposal to terminate EDA is based on our belief that the only effective means of creating permanent jobs is to encourage national economic growth.

One of the keys to national economic growth is the control of Federal spending. Given the continuing problems with the Federal deficit, we simply can no longer afford EDA.

In addition, State and local governments, which are closest to the economic problems and the opportunities at hand, must be the primary force in regional job development.

Finally, consistent with the intent of the Balanced Budget and Emergency Deficit Control Act of 1985—Gramm-Rudman-Hollings—EDA will absorb budget reductions of $1.1 million in 1986 administrative funds and $7.9 million in program grant funds. In order to ensure the continuing protection of the Government's investments, no major staff reductions are planned for fiscal year 1986.

OFFICE OF GRANTS AND LOANS ADMINISTRATION

Approval of the President's budget will result in staff reductions from 400 in September 1986 to 250 by September 30, 1987. Employees responsible for initiating or coordinating new projects will constitute the bulk of the planned employee reductions during 1987. The residual grant and loan functions and associated staff will be consolidated into the Department's new Office of Grants and Loans Administration.

This office will continue to monitor ongoing projects, collect debts owed to the Government, and provide all other administrative support necessary to ensure an orderly phaseout of the Economic Development Administration. The 1987 residual EDA staff of 250 positions will require $21.5 million, which will be derived from the proposed 1986 reappropriation.

Mr. Chairman, this concludes my prepared statement. My staff and I will be pleased to address any questions you and the members of the committee may have at this time.

EDA SUPPORT WITNESSES

Before responding to those questions, I would like to introduce members of my staff present to assist me in answering your questions.

At my left is Mr. Vince Goodman. He is our Budget Officer. If you will just respond by raising your hand in this crowd over here.

Mr. William Dohr, who is Deputy Assistant Secretary for Operations, which is the grant program.

Mr. Michael Oberlitner, Acting Deputy Assistant Secretary for Finance, which is the Loan and Loan Guaranty Program.

Ms. Eugenie Foster, our Acting Chief Counsel.

Mr. Brian Whalen, Director of Management and Administration.

And Mr. Steve Brennen, Director of Congressional Relations

Mr. SMITH. Mr. Swindle, when did you come onboard?

Mr. SWINDLE. I think it was the 18th of November of the past year, sir.

HISTORICAL EDA FUNDING REDUCTIONS

Mr. SMITH. Going back some years, I am sure you probably know this, but at one time this was a $750 million program, or something like that. It has been reduced very, very substantially, just so you know where we are coming from in Congress.

I think if I read it right—and I think I do; I think this is a bipartisan feeling—I think the feeling in the Congress is that this agency can't be reduced much more to be effective at all. It is sort of a standby agency. You get down to a certain point and it isn't worthwhile to have it at all, and I think that is the feeling in Congress.

It has rendered valuable service in the past. We don't have the kind of money we used to have to use to generate and encourage private companies, but still there are a lot of places where a small incentive with public money that can't be done any other way encourages private enterprise, which we must depend upon to provide the jobs. And that is the way it is being used, and that is what its purpose is.

So, I don't know where we are going. We have got an awfully tight budget. But my feeling is, if I read it right on both sides of the aisle, that we don't want to reduce overall any more than it has been.

CURRENT FY 1986 OPERATIONS

Are you still authorizing applications to be submitted?

Mr. SWINDLE. Yes, sir. We are going ahead throughout this fiscal year to date with work as normal. We all recognize the uncertainty of a positive requested rescission. Certainly, if you look at past efforts in this regard, we can perhaps predict the outcome. Regardless of the outcome, I have personally taken the philosophy—and I have been in this situation in similar circumstances before with the Farmers Home Administration where there was a debate over whether certain programs would continue—we have to keep on with the work, because I think to do otherwise would be irresponsible.

We are processing applications as normal. We have authorized a substantial number to date. We had projected milestones or benchmarks for obligations and authorizations through the course of the fiscal year. We are pretty well running along, if not ahead, of target right now.

Mr. SMITH. The 45-day period runs out April 15, and we had a subcommittee meeting the other day. If I remember right, it was a unanimous "no" to approve the rescission. So that will run out April 15.

On the other hand, there is this proposed deferral and transfer which is a little different problem. I assume that a resolution to disapprove the transfer will be included in some bill, but won't be done by April 15. That will come some time later.

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Grants and loans administration
[Salaries and expenses]

		1987 Base			1987 Estimate			Inc(+) or Dec(-) Over 1987 Base			
	Object class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Emp. 12/31
	Personnel compensation:										
11.1	Full-time permanent	399	399	$16,725	250	294	$12,085	-149	-105	-$4,640	417
11.5	Other personnel compensation	...	...	125	...	...	100	...	...	-25	...
11.9	Total personnel compensation	399	399	16,850	250	294	12,185	-149	-105	-4,665	417
	Other objects										
12.1	Personnel benefits: Civilian			1,970			1,461			-509	
13.0	Benefits for former personnel			...			3,590			+3,590	
21.0	Travel and transportation of persons			600			713			+113	
22.0	Transportation of things			50			120			+70	
23.1	Standard level user charges			1,769			989			-780	
23.2	Rent payments to others			2			2			...	
23.3	Communications, utilities and other rent			1,016			706			-310	
24.0	Printing and reproduction			78			50			-28	
25.0	Other services			3,834			1,725			-2,109	
26.0	Supplies and materials			76			50			-26	
31.0	Equipment			25			...			-25	
	Total requirements			26,270			21,591*			-4,679	

* Funding to be derived from reappropriation of unobligated balances.

Justification by Object Class
(Dollar amounts in thousands)

Object class		1987 Base			1987 Estimate			Inc(+) or Dec(-) Over 1987 Base			Emp. 12/31
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11.1	Full-time permanent positions										
	General Schedule	391	391	$16,188	243	287	$11,620	-148	-104	-$4,568	410
	Senior executive service	7	7	465	7	7	465	...	...	...	6
	Executive level	1	1	72	...	...	...	-1	-1	-72	1
	Total, full-time permanent positions	399	399	16,725	250	294	12,085	-149	-105	-4,640	417
11.5	Other personnel compensation										
	Overtime			50			30			-20	
	Cash awards			75			70			-5	
	Total, other personnel compensation			125			100			-25	
12.1	Personnel benefits										
	Civil Service Retirement			1,171			846			-325	
	Federal Insurance Contribution Act (FICA)			211			141			-70	
	Health insurance			375			279			-96	
	Life insurance			55			37			-18	
	Employees' Compensation Fund			158			158			...	
	Total, personnel benefits			1,970			1,461			-509	
13.0	Benefits for former employees										
	Severance pay			...			2,816			+2,816	
	Lump sum leave			...			774			+774	
	Total, benefits for former personnel			...			3,590			+3,590	

(Dollar amounts in thousands)

Object class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc(+) or Dec(-) Over 1987 Base Pos.	Inc(+) or Dec(-) Over 1987 Base Workyears	Inc(+) or Dec(-) Over 1987 Base Amount	Emp. 12/31
21.0 Travel and transportation of persons										
Administrative - Domestic			$60			$40			-$20	
Program - Domestic			188			216			+28	
Common carrier - Domestic			302			257			-45	
Change of duty station			50			200			+150	
Total, travel and transportation of persons			600			713			+113	
22.0 Transportation of things										
Household moves			20			100			+80	
Other			30			20			-10	
Total, transportation of things			50			120			+70	
23.1 Standard level user charges			1,769			989			-780	
23.2 Rent payments to others			2			2			...	
23.3 Communications, utilities and other rent										
Federal Telecommunications system			556			556			...	
Other telephone, telegraph and teletype services			357			101			-256	
Postal services by USPS			48			32			-16	
Rental of office copying equipment			55			17			-38	
Total, communications, utilities and other rent			1,016			706			-310	

(Dollar amounts in thousands)

Object class		1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc(+) or Dec(-) Over 1987 Base Pos.	Inc(+) or Dec(-) Over 1987 Base Workyears	Inc(+) or Dec(-) Over 1987 Base Amount	Emp. 12/31
24.0	Printing and reduction			78			50			-28	
25.0	Other services										
	Other services			400			...			-400	
	Centralized departmental services:										
	NOAA Computer Support			1,300			825			-475	
	Regional Administrative Support Centers (RASCs')			210			150			-60	
	Office of Secretary Reimbursable Program			108			85			-23	
	Working capital fund			1,656			570			-1,086	
	ITA Communications Center			20			5			-15	
	Other federal agencies:										
	Health and Human Services			15			...			-15	
	Small Business Administration			10			...			-10	
	Maintenance and repair of equipment			20			15			-5	
	Building alterations and repairs			25			15			-10	
	Training			70			60			-10	
	Total, other services			3,834			1,725			-2,109	
26.0	Supplies and materials										
	ADP supplies			20			13			-7	
	Office supplies			31			20			-11	
	Books and periodicals			15			10			-5	
	Other (non-capitalized equipment, photos, etc.)			10			7			-3	
	Total, supplies and materials			76			50			-26	
31.0	Equipment										
	Office furniture			5			...			-5	
	Office equipment			20			...			-20	
	Total, equipment			25			...			-25	

DEPARTMENT OF COMMERCE
ECONOMIC DEVELOPMENT ADMINISTRATION
[SALARIES AND EXPENSES]
GRANTS AND LOANS ADMINISTRATION
PERSONNEL SUMMARY

	1985	1986	1987
Direct:			
Total number of full-time permanent positions..............	434	400	250
Total compensable workyears:			
Full-time equivalent employment..........................	456	398	294
Full-time equivalent of overtime and holiday hours........	2	2	1
Reimbursable:			
Total compensable workyears:			
Full-time equivalent employment..........................	2	2	
Average GS grade..	10.86	11.51	11.63
Average GS salary...	$37,772	$40,000	$40,500

The sequestration you mentioned is $7,891,000. In the way that law is set up, are you interpreting it that you have to reduce some out of each one of these programs?

Mr. GOODMAN. Yes, sir, across the board.

Mr. SWINDLE. Across the board, yes, sir.

Mr. SMITH. What was the average size of the grant in 1986?

Mr. GOODMAN. The average size of the public works grant is about $565,000.

Mr. SMITH. As you see it now, will this Gramm-Rudman reduction reduce the average size of grants, or will it reduce the number of grants?

Mr. SWINDLE. I personally don't know that we could necessarily predict that. I think the grants themselves—and I have a lot of experience in dealing with these in another agency—they are independent of others and have their own characteristics. I think it would be just a matter of funding those that rise to the top and are approved, and it would be very difficult to predict one way or the other.

Mr. SMITH. What effect does this have on planning assistance?

Mr. GOODMAN. Across the board, 4.3 percent reduction.

Mr. SMITH. This means there is less money for planning?

Mr. GOODMAN. Yes, sir.

Mr. SMITH. And I assume the same thing for technical assistance and university center funding?

Mr. GOODMAN. Yes, sir.

REVOLVING LOAN FUND RECAPITALIZATIONS

Mr. SMITH. The conference report provided that we not repeat funding for those who receive revolving loan fund monies in 1986, and of course those that receive them don't like that very well. Others think it ought to be spread around a little bit. They think it is about time.

What is your feeling on that?

Mr. SWINDLE. Between a rock and a hard place. We have heard all the arguments. You can get just as strong an argument from one group as you can from another, as the Congressman would certainly recognize.

We feel that the conference report representing the opinions of the two bodies, while it is not a legislative requirement, certainly is an opinion that we respect; and as long as it stands, we will respect that opinion. If the conferees choose to propose a change or advocate a change in the thing, we will certainly accommodate that.

Mr. SMITH. Frankly, it was the Senate that felt strongly about it.

Mr. SWINDLE. Yes, sir.

Mr. SMITH. When they made the argument that it would be difficult to argue against it.

Mr. SWINDLE. Yes, sir. I understand.

Mr. Alexander.

CONTINUING PROGRAM EXECUTION

Mr. ALEXANDER. Welcome.

I am advised of your remarks in a recent speech in Florida, which are to be applauded. You intend to administer the law and to carry out your responsibilities in the kind of fashion that is complementary to the Economic Development Administration.

That statement may come somewhat as a surprise to you, but the reason I say it is that previous administrators of the Economic Development, Administration have harbored another point of view. We have had some who have been put there for the purpose of destroying the agency, and we have had the experience of dealing with those types over the past several years.

Assuming that Congress does not accommodate the request for rescission that is now pending before us, and that we in fact reject the position of the Administration to abolish the Economic Development Administration, how soon can you accommodate that point of view in administering the requests for loans and that are now pending before the agency?

Mr. SWINDLE. Congressman, we are responding right now. The President and the Congress agreed to appropriations for this year, and that, to me, is my job, to manage those programs. It is not up to me to take off in one direction or the other.

Rest assured, and let me make it very clear, that I totally support the President's efforts. However, we have a system here of expressing our opinions, thank God. Better said through words than through the barrels of guns. And the decision was reached that we would be funded. So, therefore, I am administering those programs.

Mr. ALEXANDER. Excuse me. Are you talking about fiscal year 1986 programs?

Mr. SWINDLE. Yes, sir. I believe that was your question.

Mr. ALEXANDER. No. My question is, are you before us now—

Mr. SMITH. Both supplemental and 1987.

Mr. ALEXANDER. I assume you are going to carry out the law as it now exists?

Mr. SWINDLE. Yes, sir.

Mr. ALEXANDER. And my question goes to the position of the Administration as far as fiscal year 1987 is concerned, which is to abolish the agency.

Mr. SWINDLE. Yes, sir.

Mr. ALEXANDER. The request for rescission, which is now pending before us, goes to that position.

Mr. SWINDLE. Yes, sir.

Mr. ALEXANDER. It tends to support the goal of abolition. And assuming we do not accommodate that request—and, in fact, Congress rejects the President's position—my question to you then would be: How soon would you respond to the applications that are pending before you? And your answer is, you are already doing it?

Mr. SWINDLE. We are already doing it, not necessarily anticipating, but I think, as I mentioned before the Congressman came in, that it would be somewhat irresponsible to totally ignore an established appropriation bill this year that exists.

There is a debate as to where we are. But in anticipation of a decision that would run counter to the proposal, I think it would be irresponsible not to be doing something. We are working normally. We have a large number, and I don't know the exact number, of proposals that have been authorized for formal application, and they are being processed.

Mr. **Alexander**. In other words, you are not trying to sandbag the agency?

Mr. **Swindle**. No, sir.

PAST EDA PERFORMANCE

Mr. **Alexander**. We have had, as I said, experience with others who have tried to, and they have been very difficult to deal with. We have had very unpleasant experiences here in this committee room.

I am not familiar with your background. I apologize for that.

Could you just express generally your view of the past performance of the Economic Development Administration and its contribution or failure of contribution to job development in our country?

Mr. **Swindle**. Congressman, my experience, very briefly, I spent 20 years as a career Marine Corps officer. My last four years in the Marine Corps I was the financial manager for the major Marine Corps Logistics Installation in Albany, Georgia.

I spent the last 4½ years as the State Director of the Farmers Home Administration in Georgia. By virtue of that job, I have had considerable relationships with EDA, for we handled many times programs that EDA was assisting in the funding of—the Appalachian Regional Council, the Small Business Administration, and HUD, through some joint efforts on housing.

I am quite familiar with these types of programs; namely, the predominant thinking of EDA is grant programs. I think I can address the question in my personal feelings towards them by speaking to some extent in generalities of all these programs.

I have no doubts that there have been few, if any, programs that have come to exist from efforts by the Congress and advocacy groups that were not well-intended. I have no doubts in my mind that much good has been done by many of these programs.

I certainly have more experience with Farmers Home Administration, and being a native Georgian, growing up in a rural area, I can tell you that many of our farmers got their starts with Farmers Home Administration.

The same can be said for the housing programs that the agency ran. Many people got their chance to have a home through subsidized loans from Farmers Home Administration. Now, they have come to a point where they earn more money. Therefore, they are able to graduate to the private credit sector and be out there paying normal mortgage rates like most of us.

There has been a great deal of good done by these programs. Unfortunately, these programs, as they proliferate—for instance, in Farmers Home Administration alone, I think at one time I counted up and there were something like 34 different loan programs. Then you multiply the number of loan programs in each one of these agencies and they become like, as one attorney told me large plum trees filled with ripe plums just waiting to be picked. They become tools for political favor, for advocacy groups, for special interest groups.

I think it has gotten to that point that the good that these agencies do is being vastly overweighed and overshadowed by the bad that is going on.

In Georgia alone, there is something on the order of $1.2 billion outstanding in farm loans today, much of which, if not the majority of which, never should have been made. They were used as bank bailouts. Probably, we will lose the better part of $1 billion in the State.

The same can be said of EDA. I have looked at many of the grants primarily, and some of the loans. Quite frankly, in my personal opinion, it is scandalous. We should not be dumping hundreds upon hundreds of thousands of dollars out on the public, on the shoulders of the public, for the building of "Great Walls of China," or Pyramids, etc.

Loans to the State of Oklahoma—for example, to the tune of some $8 million or $10 million—not a cent was ever repaid, because it was carefully worded that the repayment would come from the profits of the two resorts that we built. It is my understanding—and I think a deep investigation would probably verify this—that it was carefully arranged that no profits were ever realized. We now are in the process of liquidating those loans.

We will probably realize maybe $4 million or less in returns. We will then take from that the cost of selling the loans. It is things like this that give good agencies very bad reputations. I think we have passed that point with EDA where the bad has outweighed the good by a substantial amount, and for that reason, and no other reason, something ought to be done to eliminate that.

I don't think we as a country can continue to do things like that. It is irresponsible; it is fiscally irresponsible. And, in my personal opinion, it borders on being criminal in some cases.

I deal, since I have been up here, with so many advocacy groups wanting funds, that I literally had to have someone put together a list of them so I could keep track of all of them. There must be four or five different associations of mayors. It is just amazing the people coming to this agency, as well as others I am sure, looking for money on a grant basis. I think it has gone too far.

ADMINISTRATION OF EDA PROGRAMS

Mr. **Alexander**. That is a pretty good Rotary Club speech, but this is the United States Congress.

Mr. **Swindle**. Yes, sir.

Mr. **Alexander**. And what I was interested in is what you knew about the EDA.

Mr. **Swindle**. Sir, I think it falls into that category, and I can tell you based on what I have looked at that I do in fact support the President's efforts at doing away with this agency.

Mr. **Alexander**. That is what I thought, and that is why I asked you the question, to give you all the latitude you needed to say that, and that is of course contradictory of your first remarks.

Mr. **Swindle**. No, sir, it is not.

Mr. **Alexander**. I am not finished yet.

Contradictory of your first remarks, which is that you want to try to administer this agency in a manner that complements the policy of this nation. It sounds to me like you are trying to sandbag the agency.

Mr. **Swindle**. Congressman, may I speak?

Mr. **Alexander**. Sure.

Mr. **Swindle**. I want to make one thing very perfectly clear to you. I am quite familiar with the laws of this land. I have had a career serving my country, and I recognize and respect the laws of this land. Some of them I have not always liked. I spent 6½ years waiting for a Democratic President, and a Republican President, to end a war that we never had any intention of winning, while I sat in prison. That is not a pleasant experience.

But, as I said, when the Congress and the President, through the processes that we have, come to a conclusion that this agency will exist, I can assure you I will administer it and manage it with every intent of the law. I think you can check with the people of this agency that I have come to know in the last three months, and they will tell you that my intent is to manage this agency regardless of what size it happens to exist in. Rest assured of that.

Mr. **Alexander**. I hope, sir, in the process of doing that you familiarize yourself with the good that the agency has done in the past, because from the demeanor of your statement this morning I would conclude that you are woefully inadequate to administer the Economic Development Administration. I would hope that you would use the opportunity that has been presented to you to learn something about the good that this agency has done.

You will find this committee, and certainly myself, to be cooperative with you. We would like to hear your Rotary Club speech any time you want to give it, but we are interested in your running a good agency efficiently and economically, and to the benefit of the people in this country who are in need of job development.

Now I would invite you to come out to my State, for example, and I can take you to counties that have experienced double-digit unemployment for four consecutive years. We are hurting in Arkansas.

One of the hopes that comes from Washington is the Economic Development Administration. I know of no boondoggles in the State of Arkansas. There may be some, but there were none during the Carter Administration. I can tell you that. There were none prior to the Nixon Administration. I can tell you that.

I just want to reiterate my position to you that I hope you use your position to the advantage of people who are looking for jobs in this country, instead of from the vantage point of making a Rotary Club speech and telling everybody how bad the agency is. I don't want to hear any more of that from you.

Thank you very much.

ADDRESSING THE PLIGHT OF RURAL AMERICA

Mr. **Swindle**. Congressman, if I may respond to your comments, I don't know that I have said anything that the agency is bad. In fact, I talked about many of the good things it has done. I am quite familiar with the good things it has done, and I would challenge your assertion that I am woefully inadequate for the job. I think I am eminently qualified.

Mr. **Alexander**. I can say that based upon your performance.

Mr. **Swindle**. Yes, sir. I can assure you it will be a good performance, too.

If I may address the issue of Arkansas, I am quite familiar with the plight of rural America. Arkansas and Georgia have very similar numbers with regard to the FmHA situation. We have roughly the same number of farmers. I am very familiar with it.

Bob Hankins is a very good friend of mine. He has similar problems to what we have. I come from Georgia, and I can tell you in spades the economic development we have seen throughout the country has not reached all of rural America. I am tragically familiar with all of that because that is where I come from.

I have taken personal initiatives to rewrite the Federal Register. That is one of the reasons it was delayed until January, getting out, so I could get my say in there. It is replete with remarks about trying to divert some of these efforts and these funding vehicles to rural America to diversify the economy.

I can assure you, Congressman, that I am quite familiar with the problems. I am quite concerned with the problems, and I am quite familiar with and willing to accept the responsibilities of a person in my position. That you can be assured of.

Mr. ALEXANDER. You have the opportunity, and I will be looking at your performance.

Mr. SWINDLE. My pleasure, sir, and I look forward to working with you. I am qualified for this job.

Mr. ALEXANDER. We will see.

Mr. SMITH. Did you want to ask questions, Mr. Rogers, or do you want me to ask a few more questions?

Mr. ROGERS. Please go ahead, Mr. Chairman.

THE IMPACT OF SEQUESTRATION

Mr. SMITH. The sequestration we were talking about, do you expect that to require RIFs or furloughs?

Mr. SWINDLE. No, sir, not this year. We anticipate no more than 10 furlough days, and we just frankly don't anticipate much of a ripple at all on that. We think we can handle it without any adverse actions.

Mr. SMITH. What about reprogrammings?

Mr. SWINDLE. No, sir.

Mr. SMITH. You don't anticipate that?

Mr. GOODMAN. Not at this time, sir.

PUBLIC WORKS PROGRAMS

Mr. SMITH. We did have a local public works program.—It was when we were trying to spur employment.

Mr. SWINDLE. 1977, I believe.

Mr. SMITH. That is an example of EDA, That is when they looked around for some place to get some jobs, it doesn't do any good to have jobs after the recession is over. You need something that is ready to go right then. EDA had the structure, and it was a logical place, and I think that for the money—you can argue about whether or not there should have been any—the money put in EDA probably did as much good as anyplace else in that jobs program. There were little amounts left over in some States.

What is the status of that audit to determine how much is left over? What is its status?

LOCAL PUBLIC WORKS DE-OBLIGATIONS

Mr. **Goodman**. As of January 1st, we had approximately $22 million in the States cited in the conference report that was unliquidated. Unfortunately, that did not mean that the funds were not going to be used subsequently.

At present, we have $15.6 million in the five States cited in the conference report.

Mr. **Smith**. In the five States?

Mr. **Goodman**. Yes, sir. We have a total of $30 million unliquidated. But it was only five States in the conference report.

Mr. **Smith**. All right.

Mr. **Goodman**. Four States and the City of New York.

Mr. **Smith**. What is the status overall of this audit? When will we know exactly how much is left in every State?

Mr. **Swindle**. Congressman, if I may address that, I have gotten a pretty good briefing on this, and I think I understand the process quite well. The problem is in fully realizing where these projects are. We depend upon the grant recipient to give us that final audit that closes the books on a project, and until they do so we never really have a firm figure of what might be left over. And even then, after they close it, they have certain prerogatives that they can come back in and request that we fund from whatever excess may have been identified for an expense that they had not realized yet.

It makes it sort of difficult to start spending money that you think is left over when there might yet be claims against it. We currently have 31 projects that are theoretically closed, but still with that little caveat that they can come back against it.

There is about $4.2 million involved in that. I am speaking of New York City, where the bulk of these things are. There are some 93 there alone that are in question. There are some 62 of those 93 that are still open. There is possibly as much as over $10 million left there. But, as time goes on, that figure will continue to come down.

The problem that we have is trying to identify what is actually available. There is no way to really ascertain that. These projects have time to go.

LOCAL PUBLIC WORKS MILESTONES

Mr. **Smith**. How long will it take? What kind of a time schedule are we talking about? There must be some cut-off eventually.

Mr. **Swindle**. I have asked the same question, Congressman. I personally want to know why, for example, one grant to the Brooklyn Navy Yard, which was supposed to have been really expeditiously acted on, has never been done. Nothing has been done on it. We haven't even gotten the proper plans yet, and it has been out there for quite some time.

Oftentimes, a recipient does not move on these things. I am trying to put into effect a management system that will insist, if not demand and coerce, if necessary, people to get on with it, because it represents monies, quite frankly, that if they aren't going to use, somebody else could.

You know, we have only a limited amount of money, and we might as well use it more effectively than that.

Mr. SMITH. Not only that, but under this program the understanding was that we want jobs now.

Mr. SWINDLE. Yes, sir.

Mr. SMITH. Not several years from now.

Mr. SWINDLE. You are absolutely right.

I can cite an example in Georgia where we were pushed to the nth degree in Farmers Home to provide around $3 million, I think it was, in loan and grant funds to a small town in dire need of a sewage system. To date, they still have not gone forward with that. And I am trying to put pressure on, as well as provide some EDA assistance, to try to put the last little piece of glue to make the thing go.

One of the problems I think is inherent in the program that was adopted is the nature of what the funds were for. Public works, typically are very complex, highly involved engineering activities and by definition are almost impossible to do something quickly with it.

Mr. SMITH. They were to be projects that were ready to go?

Mr. SWINDLE. Yes, sir. But, apparently, in looking back at the experience with Farmers Home, as well as looking back at the audit of these particular programs, I am not sure that was totally understood by all. But with regard to the main question here concerning when will we know, I honestly don't know that I can give you an answer.

We will try to project an answer for you, but the big problem that I see with any pressure for us to go ahead and start using, this money is simply this: I could easily be put in a position where I am allowing to be spent money that does not exist. That puts me in a very difficult position, and we are being very careful of that.

Mr. SMITH. We had a $50 million program administered through SBA for unemployed youth planting trees in parks in the 1983 jobs bill. We put a termination date on that. I think it was October the 1st of that year. And we didn't grant any extensions. And it was spent.

Mr. SWINDLE. Yes, sir.

Mr. SMITH. It was used.

Mr. SWINDLE. I think that is a very good idea, except getting kids to go plant trees is not exactly the same.

Mr. SMITH. No.

Mr. SWINDLE. You know, as engineering projects and things like that, I think it is the nature of it. But I do think there ought to be a cut-off date, and if it is not done, it should be cut off.

Mr. SMITH. Yes.

Mr. SWINDLE. Or transferred if it can be done, or reprogrammed.

Mr. SMITH. Please put in the record as much as you can giving some idea as to the timing of this.

Mr. SWINDLE. Yes, sir.

Mr. SMITH. When we can expect this audit to be completed.

[The information follows:]

LOCAL PUBLIC WORKS (LPW) REAPPROPRIATION OF UNLIQUIDATED BALANCES

Public Law 99-190 authorizing the reappropriation of special LPW obligated balances states ". . . currently obligated but not disbursed, shall be obligated and expended during fiscal years 1986 and 1987 . . ." The appropriation language identified both the source of funding and the period of availability; however, as written, the language did not address the inherent de-obligation and apportionment requirements. Before EDA can de-obligate any currently undisbursed funds, it must be determined that: (1) The grantee has successfully completed the project and that no outstanding audit issues exist either on the part of the grantee or EDA. (2) It is legally determined that EDA will not be liable for any subsequent claims relative to a project terminated by EDA or not successfully completed (within the scope of work) by the grantee. Undisbursed funds remaining in either of these instances can then be de-obligated and the monies used to fund in total or in part those projects outlined in the Conference Report which accompanied P.L. 99-190. Because several projects within the obligated balances cited are presently incomplete, the amount as well as the date of probable availability cannot be readily determined. For EDA to authorize additional projects contingent upon potential rather than actual de-obligations could for the reasons stated result in an Antideficiency Act violation.

Mr. SMITH. Mr. Rogers.

Mr. ROGERS. Thank you, Mr. Chairman.

I apologize for being late. If, in my questioning, I cover some ground you have already addressed, just let me know and I will hit something else.

Mr. SWINDLE. Yes, sir.

Mr. ROGERS. Let me say welcome to you.

Mr. SWINDLE. Thank you.

Mr. ROGERS. Welcome to your job and to this subcommittee.

In looking over your background, I am struck by your service to the country, particularly your service in the Marine Corps as a fighter pilot and a prisoner in Vietnam for six years, and all of the other commendations that have been given to you. We thank you for the service to the country and that you have given us.

Mr. SWINDLE. I would like to say it was my pleasure to serve, but not necessarily a pleasure in those circumstances.

Mr. ROGERS. You have requested $27.6 million, assumedly for close-down costs; is that generally correct?

Mr. SWINDLE. I believe it was $40 million, out of this year, to cover the next four fiscal years, I believe is the way it was addressed.

Mr. ROGERS. Your fiscal year 1987 request is $27.6 million; is that correct?

Mr. GOODMAN. $21.5 million, sir.

CONTINUATION OF EDA PROGRAMS

Mr. ROGERS. If the committee doesn't agree with you and funds the EDA somewhere near last year's level, what your attitude be toward that. Will you be enthusiastic about administering the program, if that should be the case?

Mr. SWINDLE. Congressman, as I was addressing the question when you walked in, to Congressman Alexander, I support the President's position, philosophically, from a practical sense of my experience in the Government, in another government agency, which is very similar, almost redundant to what this agency does.

I have just had enough experience to know that we are on the wrong track. There is bound to be a better way to do this.

However, if the Congress and the President, in the deliberation process, have proposal and counterproposal and eventual compromise and resolution of what we are going to do, rest assured I will manage this agency with the enthusiasm that is always with me in things that I do for this country. I want no one to have any doubts about that.

I know somewhat about the controversy of the previous administrators, and I don't really care to express an opinion on those. I just know what I do.

Mr. ROGERS. There are a great number of us, myself included, that believe in what the EDA has been able to do. In many of the sections of the country—one of which is mine—I don't know what we would have done without the EDA in the last several years, in trying to help ourselves up by our own bootstraps. And if it weren't for programs like EDA and the Appalachian Commission and FmHA and others, I really don't know what would be the situation in the Appalachian region. EDA has been a lifesaver, frankly, in helping us help ourselves.

We are trying to get into a track of private enterprise that will keep us afloat with the rest of the country. But we still need some help. And EDA is one of those agencies that has been very helpful to us—in industrial recruiting, industrial parks, and all the projects that have gone in there.

I am thinking that you are going to get more funds than you have asked for to run the program and to carry on the mandate of the Congress for the EDA. I would hope that—and I am sure this would be the case—if you are given that money, you will administer it enthusiastically, as you say, as you have served the country in the past.

What are your proposals for the split between rural and urban projects under the public works program?

RURAL URBAN PROJECT FUNDING

Mr. SWINDLE. In early December, shortly after I came aboard, I looked at the programs and was given a tremendous amount of information to absorb, and saw historically as it was originally intended this agency was to help primarily rural areas, as I understand it. Yet, I see in the historical data of where all the loans and grants have gone—I find that New York City or New York and California are the most predominant of the recipients. Of course, California is a tremendously rural State, but there are a lot of inconsistencies with what that original mandate was.

Secondly, I come from an area that has suffered enormously through this tremendous agricultural transformation we are going through that is a combination of numerous things that we have all heard many times, not to mention the fact that our whole environment for agriculture is changed.

I have seen rural communities suffer tremendously because of their almost sole dependence upon agriculture. My home county is a good example. So I looked at what the Federal Register said, and I don't think there was a mention of rural areas in the Federal Register, or agriculturally depressed areas in the Federal Register.

Now there is, in numerous places. When I had my meeting with the regional directors in early December, I told them emphatically that I would follow it up in writing, which I did; that I insist that each region allocate no less than 60 percent of its funding to rural areas in all programs.

It may be impractical by State, because of the make-up of a particular State, to do that. But, certainly, the regions can work towards that goal. To date, we are pretty well along that track. I am going to insist that they adhere to my instructions and go in that direction.

I am extremely concerned about areas out in the rural hinterlands that have the sole dependency upon one type of industry. I think we have simply got to diversify.

I recognize the good that many of these agencies have provided. I think there also goes along with that good a tendency to depend on those programs to sustain a way of life that, of necessity, must change.

I would certainly point to my own area of the country where we are growing a great deal of wheat, soybeans and corn. In the State of Iowa they grow more corn in one county than we grow in the whole State. One has to wonder how long we can continue to try to compete with that type of competition.

I think, unfortunately, many of these programs have made it easy to continue doing what we have always done. And, Lord knows, we certainly can look to how much money has been put into Appalachia through these programs; how much money has been put into Georgia and Mississippi in particular, from Farmers Home Administration; and the situation has not gotten better. It has gotten worse.

I think to a certain extent this type of assistance, although it can do some tremendous good, oftentimes becomes a kind of narcotic that makes us think we can continue it and it will always be there; therefore, there is no reason to adapt to circumstances. I am acutely aware of the problem.

Mr. Rogers. I am interested to hear you say that. We are attempting to adopt.

Mr. Swindle. Yes, sir.

DIVERSIFICATION OF TARGET AREAS

Mr. Rogers. We are going to have to change.

Mr. Swindle. We have to.

Mr. Rogers. And I am glad to see that you are going to be attentive, sensitive to those areas that are attempting to make some change, transition.

In my own area, for example, I know there is an effort, conscious thoughts being talked about diversifying our crop production.

Mr. Swindle. Yes, sir.

Mr. Rogers. To supplement tobacco income, because of the drop in domestic sales. And part of my district is dependent upon coal, and they are certain to try to find other types of industry to begin to diversify away from a one-industry operation.

Mr. Swindle. Yes, sir.

Mr. ROGERS. Reliance on a single major source of income has a constant roller coaster effect. You know nationally the unemployment rate has been dropping substantially over the last few years, and that is just fantastic. We are delighted with it. But there are pockets within the country, very large pockets, and I represent one, that has simply not been caught up in that improvement. The unemployment rate in my district has been going up. Unemployment has been going up.

We don't have any defense plants, so we are getting no defense spending. We don't have any of the high tech industries that have been booming here of late, and so on. And while the national economy has been booming, ours has been busting.

Mr. SWINDLE. Yes, sir.

Mr. ROGERS. And we are making efforts to try to attract some of the small industries in there. I just helped form the Southern Kentucky Economic Development Task Force of the 27 counties in my region to regionally pull together to try to attract industry and the like on a regional basis. But you can't do it without some help on industrial development parks and other things that we just don't have the resources, nor does the State have the resources with which to help.

So I would hope that you would be particularly attentive to those regions of the country that are in transition, as you say, and are attempting on their own to pull themselves up and catch themselves in the mainstream of the progress that the other parts of the country are achieving but, for whatever reason, have not been able to get out where the current is swift. We are still caught in the backwater, if you will.

I think that was the original idea behind EDA, and it still is. And I think it should be the motivating force. Believe me, as you well know, there are regions of this country that are suffering, and many of those regions strongly believe—they have the old-fashioned ethic—that we should do it for ourselves. And we are attempting to do that. But sometimes it is just impossible to do it without some sort of help.

Mr. SWINDLE. Yes, sir.

REVOLVING LOAN FUND APPLICATIONS

Mr. ROGERS. I am glad to hear that you are sensitive to that philosophy.

There was a footnote in the FY 86 conference report, that came from the Senate side, directing EDA to grant awards only to new revolving loan fund applicants.

Can you tell us what the effect of that footnote has been?

Mr. SWINDLE. We have discussed that very briefly before you arrived. The effect of it has been dramatic. We have those who are standing up and cheering for it, and we have a similar number who dislike the prospects of it, and I think both sides have valid arguments.

We are caught in the awkward position of having to recognize the conferees' wishes. If it had just come from one side of the Congress and not the other, we might have taken a different approach to it. But since it was a consensus opinion supposedly, we are honoring that consensus. I have stated earlier that if there is a preference on the part of the conference or the conferees to change that intent, we can probably accommodate that.

We have notified our field offices that we will honor that commitment, and we are not recapitalizing, as the expression goes, the revolving loan funds that now exist.

Mr. **Rogers**. In my State, we have area development districts, and they are very effective.

Mr. **Swindle**. Yes, sir.

Mr. **Rogers**. And that language practically prohibits some of those districts from participating in these EDA programs.

Mr. **Swindle**. I personally think it is somewhat short-sighted, and it puts us in a very inflexible position. I think we ought to have the prerogative to assist where assistance is validly needed and earned, by those districts that are using this fund effectively.

Now we have some districts or recipients that literally are not using it effectively at all. I am also pursuing ways perhaps of saying, well, give it back if you aren't going to use it, and let me give it to somebody else. There is just no sense in letting something just sit out there and not be used.

On the other hand, if we have very dynamic operations going on, and so much of that is dependent upon dynamic local leadership, then it seems illogical not to provide them the ability to continue, up to a certain point. I think at some point they should be self-sustaining, and we should stop the program altogether at that point.

Mr. **Rogers**. What will be the impact if that language is left in place for the full fiscal year or longer?

Mr. **Swindle**. We will have a lot of new revolving loan funds set up, if we continue with our funding, and we will also have probably some unhappy previous recipients who would like to recapitalize so they can expand on what they are doing.

Mr. **Rogers**. Would you agree that it is too inflexible?

Mr. **Swindle**. It is too inflexible, yes, sir; there is no doubt about that.

LOAN DELINQUENCY RATES

Mr. **Rogers**. The delinquency rate on EDA loans, have you covered this?

Mr. **Swindle**. I don't believe we have covered that specifically.

Mr. **Rogers**. Do you know the current dollar value of delinquent loans?

Mr. **Goodman**. Yes, sir. The current value of delinquent loans is approximately $377.6 million.

Mr. **Rogers**. What percentage of the portfolio does that represent?

Mr. **Goodman**. Of the total portfolio including public works loans, 36 percent.

Mr. **Rogers**. To what do you attribute that problem?

Mr. **Goodman**. I don't understand the question.

Mr. **Swindle**. Why are they delinquent?

Mr. **Rogers**. Yes. That is a very large percentage.

Mr. **Goodman**. The delinquency rate has gone up because of the fact that we have not made any additional loans over the past five years. As the current debtors pay off, needless to say, the bad loans tend to cause the appearance of a delinquency rate going up. It is because the good loans are coming out.

Mr. SWINDLE. Congressman, if I may shed some personal observations on that subject, it is a large amount. But to keep things in proper perspective, in Georgia the farm loans are delinquent, almost $750 million, about 57 percent of that portfolio, which is almost twice the delinquency here.

From my personal involvement, we guaranteed loans under that program. I would venture to say in observing how the loans were made and why they were made, they were probably delinquent the minute they were made. They never should have been made; in other words, very bad loans. I hope that my personal direction will ensure we minimize those kinds of loans in the future.

This is not a lending agency of last resort. It is not designed to bail out banks. We are not there to take the financial losses of the private sector and put them on the taxpayers' backs. I am going to try very expertly to avoid doing that in the future.

DEBT COLLECTION INITIATIVES

Mr. ROGERS. Did you make any collection progress last year?

Mr. SWINDLE. Yes, sir. We increased collections by approximately $1.1 million, I believe, over the last year. And we are really stressing the servicing end of this whole process.

Mr. ROGERS. And you are going to keep after those delinquencies?

Mr. SWINDLE. Absolutely.

One of the proposals that I have in the future on guaranteed loans—and I was much surprised to see that in EDA in the past when a loan became delinquent, the bank asked to be paid off, and EDA paid them off, and then assumed the delinquent loan or the troubled loan. I think that is rather illogical, because with rare exceptions the bank typically came to EDA for the guarantee. It was their idea to begin with.

I am going to insist, as we do in Farmers Home, that the bank service that loan to its final conclusion, be it a workout or liquidation, and be responsible for it. I think that is incumbent upon the lender to do that.

Mr. ROGERS. Do you intend to renew the efforts to sell the loan portfolio to a lender?

Mr. SWINDLE. I think that is a very valid consideration. As I am sure the Congressman is aware, we are restricted without the borrower's consent, from doing such. I think it has a lot of merit. In other agencies, we have similar programs of graduation to the private sector.

I recognize one of the inherent dangers in that we might be selling it off to some rather cruel lender that wants to take other action to put the borrower to a great deal of inconvenience and perhaps liquidate him. We would try to avoid that. We have had some success in past years to avoid selling the loans. There is merit to it.

Mr. ROGERS. What do you estimate the recovery rate would be?

Mr. SWINDLE. I personally don't know the answer to that.

Mr. Oberlitner, would you comment on that?

Mr. OBERLITNER. It varies considerably due to the collateral securing a particular loan. I think it can generally be said in the note sales we have conducted we have achieved a higher recovery than we would under a liquidation.

Mr. ROGERS. But what you sold has probably been your best—

Mr. OBERLITNER. The ones that we have sold have been primarily cases where it was an alternative to liquidating. There have been a few what we call present value sales, where we sell a loan at its current value. But as far as an actual note sale, none have been conducted without the consent of the borrower, and they have more often than not been the alternative to liquidation.

Mr. ROGERS. Thank you very much.

Thank you, Mr. Chairman.

DETERMINING A DISTRESSED AREA

Mr. SMITH. You mentioned the inclination to try to prefer depressed areas. How do you determine what is a depressed area?

Mr. SWINDLE. Well, sir, certainly unemployment figures are one of the indicators. I challenge the unemployment figures personally, because I look at areas that I am very familiar with in my home State and I find that we don't have many with the red coloring on the map. And I say, what is the red color for? Well, that is the unemployment rate of 10-plus or whatever. And I started questioning this, and I had previously questioned it when I was in Farmers Home. And I am insisting that in the future all proposals we get—one source of information that I have insisted that the Economic Development representative in the State go to is the Farmers Home Administration, because too often in rural areas where there is heavy concentration of farming, they don't get counted very well in the unemployment statistics.

Most farmers don't want to talk to anybody that comes out from the Federal Government to begin with. They don't normally go out and apply for jobs. So I don't think they are counted, because I know for a fact in my part of the country we have tremendous economic depression or recession problems. You know, store fronts are closed up and things like that. Yet, we sit there with a 6.7 unemployment rate and everybody says you are doing great, but we are not doing great.

I am asking that my agents out in the field collect data wherever we receive an application to substantiate beyond just an unemployment situation as to what the situation really is. I said I want them to paint me a good picture. My whole reason for directing it toward the rural areas is because I do know for a fact we have problems out there.

UNEMPLOYMENT CRITERIA

Mr. SMITH. I remember a few years ago when we had the poverty program under Sergeant Shriver. They had, I think 15 percent unemployment according to those statistics in Detroit, and 5 percent in Iowa. And as part of the poverty program they made a survey to find out how many people were available for work. There were actually more people available for work in Iowa than there were in Detroit.

Mr. **Swindle**. That would not surprise me.

Mr. **Smith**. The difference is that unemployment statistics, although they have helped cure some of this problem, is still in the statistics and you can't get it out of there. To a large extent, they measure the number who are lucky enough to have been covered by unemployment in previous years rather than the number who really wanted employment. We have got in Iowa, a large, number of women who have never been employed and who don't go down and apply because they know there is no work prospects down there. But they are available.

Some of these smaller factories, some with the help of FMHA and EDA, got started in some of these smaller places a few years ago, and they found out they could go in and in 30 days' time they could get 300 or 400 good employees, most of whom had never had a job before. In most cases, they have had some training.

On an average, I would say they were high school graduates. They were easily trainable. Unemployment statistics just didn't measure that.

Mr. **Swindle**. Yes, sir.

Mr. **Smith**. And that is the reason I asked you about this thing about depressed areas. And the same thing is true in the core areas of the larger cities.

Mr. **Swindle**. Yes, sir.

Mr. **Smith**. Some of those young people have never applied for jobs because with all the training there is no job there.

Mr. **Rogers**. Will you yield on that point?

Mr. **Smith**. Yes.

Mr. **Rogers**. That is exactly correct. And in addition to that, there is a huge number of people in this country that are underemployed. They have a job, just barely, barely getting by—that I would classify really as unemployed, but they don't come up on the records that way. And then there are those marginal farmers that have a small enough farm that they have to live there and try to do what they can with it, but really can't get by on it, who with an employment opportunity will stay on that farm and work in a small factory and be able to make a decent living. But they don't show up either on those unemployment records.

Mr. **Smith**. I think it is so bad that for that reason I was opposed to targeting. Targeting relies eventually, almost entirely, on these unemployment figures. I hope you can figure out a better way and have less dependence on those unemployment figures.

JOBS CREATION

Mr. **Swindle**. Mr. Chairman, I can assure you that is the case, because I have challenged our people just head-on with this thing. I just recently dealt with a case, an application, we received from South Dakota, I believe it was, in which on the face of the material submitted to us I said no; and then I said now I want you to go back and present something to me that reflects the whole picture, because all they had addressed was an unemployment rate of 6.5 percent.

I have got a list here—I don't think I have it with me—of every county in the country with an unemployment rate in excess of 10 percent, and there are a substantial number—I think it was 300, or something like that. I said don't tell me that this is the real picture. I personally called the State Director of the Farmers Home Administration, who is a personal friend of mine from South Dakota, and I said, "Will you please tell me the situation with the farming community?" I knew this was a farming area, around that municipality, that little town.

It is deplorable. I could have painted an entirely different picture of the situation which would have justified the assistance they asked for.

So it is that kind of philosophy I am trying to get across to our people.

Secondly—and I think this is perhaps the most important single thing to keep in mind—the Federal Government is not going to go in there—it cannot go in there and cure these problems. Look at, again, Appalachia, the Southeast farms where we put all this money in, and we really haven't cured the problem. In fact, I would contend it may have gotten worse.

REQUIRED LOCAL LEADERSHIP

However, where we have been able to provide some assistance—and this has been the most essential ingredients for success that I know of—is the dynamic local leadership. That makes a difference. I can show you case after case where there is a dynamic local leadership.

Unfortunately, some of our local leaders think that by dumping a big pot of Federal money it is going to solve the problem. I almost get the feeling that they like to have high unemployment so they can continue to justify more money being dumped in, and we never really have solved the problem.

Congressman Alexander mentioned earlier I had spoken to a group in Florida. I have spoken to a number of groups, one group of which was this association of these area Planning and Development Commissions, or Economic Development Commissions, district units, and I have challenged them. I said don't think just by putting money on the problem you are going to solve the problem. It is going to take you people finding the best, the highest priority needs, when we have got constrained resources, coming up with innovative ideas and getting local people involved in driving this thing.

It does not solve the problem to merely shove money up on the table. You have got to have people to drive it.

Mr. SMITH. Eventually, you have got to have an employer who is going to provide these jobs.

Mr. SWINDLE. Yes, sir.

Mr. SMITH. You can't make him go into the area that has the highest unemployment if that is not economically feasible for him to do. But he may be able to go into a neighboring area that doesn't show up on these statistics, and those people can drive to that area.

Mr. **Swindle**. Exactly. We have these growth centers, and we recognize certainly that you can't go in and create a booming economy in every little county because it just doesn't work that way. But we do have central points or hubs, if you will, of a series of counties, and that is where we are trying to concentrate.

But, again, if there is dynamic local leadership that is going out there and saying, hey, we are ready to go to work, we have got the people, the resources, it will draw in these industries. We have just got case after case where this has been proven.

Mr. **Smith**. What I am saying is that there are service centers, and some of these new industries have got to be close to a service center, or they can't be serviced.

Mr. **Swindle**. Absolutely.

Mr. **Smith**. Mr. Alexander.

ECOMONIC DEVELOPMENT OPPORTUNITIES

Mr. **Alexander**. I would like to compliment your observation, Mr. Swindle, from the standpoint of recognizing the desire among some people, through local leadership, to help themselves.

A minute ago you were talking about the dependence upon Federal agencies and the propensity of some regions to grovel at the prospects of more Federal money that does not relate to any experience that I have ever had with the Economic Development Administration.

Admittedly, mine is somewhat limited to the region that I represent in Arkansas and the Middle South part of the United States, together with some isolated exceptions in Pennsylvania and so on.

But I wish to compliment the gentleman on focusing upon that positive aspect of the potential of your agency, and reinforce that position from my vantage point, to observe that in most cases where I am contacted by local agencies people are trying to get the Federal Government to provide them with the building blocks for the future. They are asking for help so that they can help themselves.

I do not relate to this other view that I have heard you express and which I think skews the overall experience of the Economic Development Administration, I think, in the overall scheme of things. That is why I was critical originally of the gentleman's point of view. But, I certainly agree that there are many, many instances in this country where you have poverty, with a willingness to work, and some modicum of local leadership which, if put with a helping hand from the Federal Government, can yield enormous benefits.

The record is replete with examples of this throughout the 20-odd-year history of the Economic Development Administration. I would encourage the gentleman to focus upon those opportunities throughout the country because they are abundant.

Mr. **Smith**. Mr. Rogers.

Mr. **Rogers**. I couldn't agree with the gentleman more, also.

On another point, that is that you can almost see—well, you can see where, say, a new highway has penetrated a section of Appalachia, you can just see the flowers begin to grow on that stem—factories, commercial development, people moving from the surrounding areas adjacent to that artery. And one of the best things that EDA, ARC particularly, has done in the Appalachian area is helped build those arterial highways to open up this region.

The biggest problem is access. And once they get that access, then the private sector begins to develop it. And I would hope that when you think about Appalachia—let me ask you to think about it in this way: Appalachia has furnished the car manufacturers employees in Detroit for three generations. We are now furnishing—were furnishing the oil boom in Texas with their workers. We have furnished the steel makers in Pittsburgh with their workers.

You can't find a family in the Appalachian section of this country that has all of its families living at home. They are living in Detroit, Ipsilanti, Pittsburgh and Houston. We have got the quality of work there.

What we need and have needed, and are beginning to get over the last several years, is local leadership that has the willingness to lay it on the line, and then justify those needs to agencies such as EDA. And we are making some progress. We really are. We have to have the understanding and the willingness on the part of those positions like yours—certainly in your position—that where you have got local leadership, as you have suggested, willing to lay it on the line and to realize the basic problem, then put your eggs in that basket, because it will pay enormous dividends, and it is paying enormous dividends.

I could point out example after example. But the problem in those poverty sections that I know about—and that is a good part of the Appalachian area—is just the lack of the physical resources, highways, roads, water, water supply, and industrial park possibilities. Those communities are popping and cracking with the local leadership. They realize there are problems.

There is a new attitude there. In the last five years, it has absolutely changed 180 degrees in my area in Appalachia. We know that the old ways won't work. The fact that EDA in the past, FHA and ARC, would come down there and annoint us with a big pile of money, half of which would have been wasted or consulted away or whatever, we realize that they were doing us a disservice.

What we want, and we are doing it now—and you check it out—what we are doing now in that area, especially in mine, is we are developing our local community leadership cadre in each community, the ones that especially have potential, those leadership development centers, growth centers, and then we are having them systematically prioritize their needs, looking towards growth, attracting employment opportunities in the private sector. And in those few cases—and there will be a few cases where we are going to be coming to EDA—we are going to try to justify it based on the fact that we can use that as leverage in some way to get an employment opportunity into that community in the private sector.

We, ourselves, for God sakes, don't want the Federal Government. That area historically has fought the Federal Government. It is the most independent spirited people in the United States—the mountain people—and we don't want any more of our independence taken by a huge cancerous growth in Washington.

But there are those opportunities where we can use that leverage to get us independent, and those are the ones that I think we should look at nationally as well as locally.

PROGRAM DIRECTION

Mr. **Swindle**. Congressman, if we have a program, rest assured that is where the attention is going to be given. I have made that point.

As I have said, I visited all of the six regional offices. My point has been very clearly made. It will be reinforced with frequent visits to look at what they are doing.

I have a staff that I think is extremely competent. They are totally supportive of what I am trying to do. They understand what I am trying to do. And the emphasis in EDA is toward rural America, with proper consideration given to urban areas, when there is a legitimate case.

But I recognize these inherent invisible or intangible problems that don't seem to show up on the statistical report, as the Chairman was mentioning earlier—and we are going to direct our attention to that if the program exists, and I assure you it will be run well.

Mr. **Rogers**. And in the transition that is going on, it is going a pace, and is something that I don't think anyone can affect in the agriculture areas of the country. There are some bright novas that are shining in all of that.

For example, in the Midwest and the Midsouth, which looks like it is becoming the new automotive capital of the world, there are tremendous opportunities for those people that have been historically left out of the economic growth of the nation that are now beginning to have the opportunity to come into their own.

And I would point out it is very easily seen even if you look at a map—the Honda plant in Marysville, Ohio; Saturn in middle Tennessee; Nissan in middle Tennessee; Toyota in Georgetown; the new Corvette GE plant in Bolling Green; the Ford plant in Louisville. And there is a new factory in Western Virginia. All of those are locating in the peripheral area of those huge labor-plentiful areas, low cost. And there is a historic change, I think, taking place.

I really think the Federal Government ought to jump on that wagon, because it offers a tremendous opportunity for you to get a hell of a lot of people off welfare and on to the taxpaying rolls. I just think it is a super opportunity for us to move a region way out front.

Mr. **Smith**. But in almost every case in those areas they had to have some public money to provide some public facilities.

Mr. **Rogers**. That is right.

Mr. **Smith**. So that private enterprise could come in.

Mr. **Rogers**. That is exactly right.

Toyota, in Lexington, for example, will be building an $800 million—they are going to spend that much. The State of Kentucky and the agencies are going to be putting up about $350 million. It is big-time stuff, and that is just one plant.

Mr. SMITH. My other question is: do you have the flexibility you need in this area, or do you feel hamstrung by the law or rules and regulations with regard to identifying areas that are eligible?

Mr. SWINDLE. I think I have the flexibility, sir.

Mr. SMITH. You do?

Mr. SWINDLE. It is just the leadership and direction we are going to go. If we have a program, I will assure you it is going to those areas. We are going to stop all of this other stuff. It may raise a few ruffles here and there, because we turn some people down on things. But I am going to do my part in it.

I come from those areas, and I know what the problems are out there. At least I am familiar with some of them.

Mr. SMITH. If there are no more questions, thank you very much.

Mr. SWINDLE. Thank you, sir.

[Questions for the record follow:]

Questions for the Record by Congressman Alexander

Question:

Please provide for the record a listing, by name and location of all Economic Development Representatives employed as of February 28, 1986, and in any instances where an EDR was in place on August 31, 1981, and was not in place on February 28, 1986, please identify the location and the beginning date of the vacancy.

Answer:

Economic Development Representatives as of February 28, 1986:

PHILADELPHIA REGION

Name	Location
Arturo Febry	Hato Rey, PR
Ronald Davis	Charleston, WV
Clifford J. Rossignol	Trenton, NJ
William A. Fitzhenry	Boston, MA
Vacant*	Annapolis, MD
Sandford Blitz	Augusta, ME
Charles N. Hammarlund, Jr.	Hartford, CT
Anthony M. Pecone	Philadelphia, PA
Neal E. Noyes	Richmond, VA
Rita V. Potter	Concord, NH
Harold J. Marshall, II	Syracuse, NY
Jerome E. Wallace	New York, NY
Vacant*	Clarksburg, WV

Subtotal........................ 13

ATLANTA REGION

Name	Location
Leroy Anderson	Atlanta, GA
Charlie Mason	Lexington, KY
William G. Glasscock	Hopkinsville, KY
Bobby D. Ainsworth	Jackson, MS
Patricia Dixon	Columbia, SC
Mitchell S. Parks	Nashville, TN
Dale Jones	Raleigh, NC
F. Wayne Burnette	Montgomery, AL
Carlton P. White	Tallahassee, FL

Subtotal....................... 9

CHICAGO REGION

Name	Location
James Collison	Lansing, MI
John B. Arnold	Duluth, MN
Philip Lavelle	Athens, OH
Virginia Ormsby	Springfield, IL
John Peck	Indianapolis, IN
Jack Price	Eau Claire, WI

Subtotal 6

DENVER REGION

Name	Location
Forrest E. Koch	St. Louis, MO
Warren A. Albertson	Pierre, SD
Jack Ockey	Salt Lake City, UT
Cornelius P. Grant	Bismarck, ND

Subtotal 4

AUSTIN REGION

Name	Location
Willeen Hough	Little Rock, AR
Pamela Davidson	Baton Rouge, LA
James Swearingen	Santa Fe, NM
Hunter Kemmet	Oklahoma City, OK
Norris Willis	Austin, TX
Roy Ramirez	Austin, TX
Vacant*	Lubbock, TX

Subtotal 7

SEATTLE REGION

Name	Location
Aldred F. Ames	Boise, ID
Paul Luke	Phoenix, AZ
Hugh Taylor	Oakland, CA
Jay M. Busch	Seattle, WA
Frank McChesney	Seattle, WA
Bernhard Richert	Anchorage, AK
Marilyn Williams	Los Angeles, CA
Deena Sosson	Sacramento, CA
Anne S. Berblinger	Portland, OR
William J. Lewis	Carson City, NV

Subtotal	10
Total EDR positions	49

*At present, there are three EDR vacancies, none of which existed on August 31, 1981. Following is the status of current EDR vacancies:

o Clarksburg, West Virginia - This vacancy was created upon the retirement of Rene Zabeau in January 1986.

o Annapolis, Maryland - This vacancy was created in September 1985 when Robert Roberts transferred to the Office of Public Works in EDA headquarters. This position has been advertised. The vacancy announcement closed March 13; we expect to make the selection for this position within the next two to three weeks.

o Lubbock, Texas - This position has been vacant since July 9, 1984. There are three EDR positions in Texas. Two of these have been relocated to Austin. By moving these positions to a major transportation hub, we have increased the effectiveness of our operations to the point where the third position simply is not necessary.

Question:

Please provide for the record a listing of all university centers which received grants under the University Center Program in Fiscal 1985, giving the name and geographical location of the center and the amount of the grant awarded under the Fiscal 1985 Program.

Answer :

Following is a listing of University Centers funded by EDA in fiscal year 1985:

UNIVERSITY CENTERS FUNDED BY EDA
IN FISCAL YEAR 1985

CENTER NAME	LOCATION	BASIC FUNDING	SUPPLEMENTAL FUNDING
COPPIN STATE COLLEGE	BALTIMORE, MD	8941.00	
HAMPTON INSTITUTE	HAMPTON, VA	100000.00	
MARSHALL UNIV, WVA	HUNTINGTON, WV	100000.00	
MASSACHUSETTS, UNIV OF	AMHERST, MA	80000.00	
NEW HAMPSHIRE, UNIV OF	DURHAM, NH	80000.00	48000.00
PA STATE UNIVERSITY	ST COLLEGE, PA	100000.00	40000.00
RESEARCH FDN SUNY	ALBANY, NY	80000.00	
RUTGERS, STATE UNIV	NEWARK, NJ	80000.00	
SO. MAINE, UNIV OF	PORTLAND, ME	80000.00	
ATLANTA UNIVERSITY	ATLANTA, GA	100000.00	
AUBURN UNIVERSITY	AUBURN, AL	80000.00	50000.00
BENEDICT COLLEGE	COLUMBIA, SC	100000.00	
FLORIDA STATE UNIV	TALLAHASSE, FL	80000.00	39000.00
GA TECH RESEARCH INST	ATLANTA, GA	80000.00	
MS RESEARCH & DEV CTR	JACKSON, MS	80000.00	
MEMPHIS STATE UNIV	MEMPHIS, TN	80000.00	
UNIV OF KENTUCKY	LEX-FAYETTE KY	80000.00	
WESTERN CAROLINA UNIV	CULLOWHEE, NC	80000.00	
IOWA STATE UNIV	AMES, IA	80000.00	72000.00
NORTH DAKOTA STATE UNIV	FARGO, ND	85000.00	
UNIV OF COLORADO	BOULDER, CO	85000.00	70848.00
UNIV OF MISSOURI	COLUMBIA, MO	80000.00	
UNIV OF NEBRASKA	LINCOLN, NE	100000.00	
CLEVELAND STATE UNIV	CLEVELAND, OH	100000.00	
ILLINOIS AT CHICAGO CIR	CHICAGO, IL	100000.00	50000.00
INDIANA/PURDUE	INDIANAPOLIS	90000.00	
UNIV OF MICHIGAN	ANN ARBOR, MI	100000.00	60000.00
BOISE STATE	BOISE CITY, ID	100000.00	
OREGON STATE UNIV	CORVALLIS, OR	85000.00	
UNIV OF ALASKA @ JUNEAU	JUNEAU, AK	100000.00	
UNIV OF HAWAII	HONOLULU, HI	100000.00	34993.00
UNIV OF SOUTHERN CALIF	LOS ANGELES CA	100000.00	30000.00
WASHINGTON STATE UNIV	PULLMAN,WA	100000.00	
EAST CENTRAL OKLA STATE	ADA, OK	80000.00	
LOUISIANA STATE UNIV	BATON ROUGE LA	60000.00	
UNIV OF ARKANSAS	LITTLE ROCK AR	80000.00	
UNIV OF NEW ORLEANS	NEW ORLEANS LA	60000.00	
UNIV OF NEW MEXICO	ALBUQUERQUE NM	80000.00	
UNIV OF TEXAS	SAN ANTONIO TX	85000.00	
XAVIER UNIVERSITY	NEW ORLEANS, LA	100000.00	
		----------	----------
		3418941.00	494841.00

Question:

Please provide for the record a listing, by center name, geographic location and grant amount any university center(s) EDA has or expects to fund with Fiscal 1986 funds which centers have not received university center grant funds in the past five Fiscal years.

Answer:

EDA is in the process of deciding which educational institutions that have not previously received EDA support should receive university center grants in Fiscal 1986. We expect to select four to six colleges or universities and to provide them with grants in the $100,000 range.

Question:

Please provide for the record a listing of any economic development district(s) which EDA provided a planning grant to in Fiscal 1985 but which EDA does not anticipate providing a planning grant to in Fiscal 1986.

Answer:

These funds are proposed for rescission, as are most EDA grants funds. If the rescission proposal expires, EDA anticipates providing planning grants to all of the economic development districts funded in Fiscal 1985. Three districts funded in Fiscal 1985 initially received Fiscal 1986 planning grant amendments for only six months, with the warning that if their performance did not improve significantly they would not receive additional funds. These grantees have subsequently improved their performance and will probably receive six-month grant amendments at the appropriate time. To date, EDA has not identified any other previously funded district that would not receive funding in Fiscal 1986. However, given the length of time remaining in the Fiscal Year, it is still possible that outstanding audit problems or performance considerations would preclude the continuation of some district grants in the coming months.

Question:

Please provide for the record a listing of any economic development district(s) which EDA expects to provide a planning grant in Fiscal 1986 but which EDA has not provided such a grant to in at least one of the five previous years.

Answer:

EDA does not expect to offer a Fiscal 1986 planning grant to any district that was not previously funded.

Question:

Please cite, with specific details, the criteria used for allocating Fiscal 1986 funds to each of its regions, and if these criteria are different from those used in fiscal 1985, please specifically describe the differences.

Answer:

The principal criteria used for distributing EDA funds to regions are population, unemployment and per-capita income in EDA eligible areas. These are the same criteria as those used in Fiscal Year 1985. The allocation procedure has two stages. In the first stage, an initial allocation is calculated using a arithmetic formulation. In the second stage, the initial projections are reviewed and needed adjustments are made. In making these adjustments, EDA incorporates information that could not be included in the initial formulation. An example would be evidence of regional economic distress that are too recent to be reflected in official Government estimates.

The allocation formulation is shown below.

Identification of Symbols

USA = national allocation
UA = regional allocation derived from urban formulation
U = urban weight (50 percent in 1985, 40 percent in 1986)
RA = regional allocation derived from rural formulation

R = rural weight (50 percent in 1985, 60 percent in 1986)
A = regional allocation
UP = total population in EDA designated urban counties
RP = total population in EDA designated rural counties
UPCI = per-capita income in EDA designated urban counties with less than the national average per-capita income
RPCI = per-capita income in EDA designated rural counties with less than the national average per-capita income
UUN = unemployment rate in EDA designated urban counties with a twenty-four month average unemployment rate greater than the national average
RUN = unemployment rate in EDA designated rural counties with a twenty-four month average unemployment rate greater than the national average

j = subscript denoting EDA region
o = subscript indicating summation as in $\sum_j UP_j = UP_o$

Formulation used for Public Works and Regional Technical Assistance Programs.

$$UA_j = (UxUSA) \times \left[\left(.5 \times \frac{UP_j}{UP_o} \right) \times \left(.25 \times \frac{UPCI_j}{UPCI_o} \right) \times \left(.25 \times \frac{UUN_j}{UUN_o} \right) \right]$$

$$RA_j = (RxUSA) \times \left[\left(.5 \times \frac{RP_j}{RP_o} \right) \times \left(.25 \times \frac{RPCI_j}{RPCI_o} \right) \times \left(.25 \times \frac{RPCI_j}{RPCI_o} \right) \right]$$

$$A_j = UA_j + RA_j$$

The formulation for the Long-Term Economic Deterioration/Revolving Loan Fund (LTED/RLF) is similar to that above except:

o population, per-capita income, and unemployment are calculated for LTED/RLF eligible areas rather than general EDA eligible areas;

o the pre-capita income was calculated for all eligible counties with less than 75 percent of the national average per-capita income; and

o the unemployment rate was calculated for all eligible counties with a twenty-four month average unemployment rate of 12 percent or greater.

EDA's other programs are not based on predetermined allocations.

Question:

Please cite, with specific details, the criteria used by each EDA region to allocate funds to each of the states in their region in connection with the Fiscal 1986 funds. If the criteria used for the allocation to states of the EDA funds was different from that used for Fiscal 1985, please specifically detail the differences.

Answer:

EDA regional offices do not allocate funding by state or by any other political jurisdiction or geographic location. Each region conducts an open competition from among all its applicants in each program category. Projects are selected on merit, even when this results in irregular geographic distributions of funding in particular programs in particular years.

Questions:

Please provide for the record a copy of each memorandum, letter, or other document of guidance and/or instruction distributed from the Washington EDA headquarters to the regional offices setting out the criteria to be used in allocating funding amounts to the states within each region.

Answer:

Because regional offices allocate funds only on the basis of the merit of the applications, there are no instructions to regional offices concerning the allocation of funds by state.

FRIDAY, MARCH 21, 1986.

INTERNATIONAL TRADE ADMINISTRATION

WITNESSES

BRUCE SMART, UNDER SECRETARY FOR INTERNATIONAL TRADE

J. MICHAEL FARREN, DEPUTY UNDER SECRETARY FOR INTERNATIONAL TRADE

PAUL FREEDENBERG, ASSISTANT SECRETARY FOR TRADE ADMINISTRATION

JOSEPH DENNIN, ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY

PAULA UNRUH, DEPUTY ASSISTANT SECRETARY FOR U.S. AND FOREIGN COMMERCIAL SERVICE

PAUL M. VOORHEES, DIRECTOR, OFFICE OF FINANCIAL MANAGEMENT

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. Next we have the International Trade Administration.

[The justifications follow:]

DEPARTMENT OF COMMERCE
INTERNATIONAL TRADE ADMINISTRATION

Budget Estimates, Fiscal Year 1987
Congressional Submission

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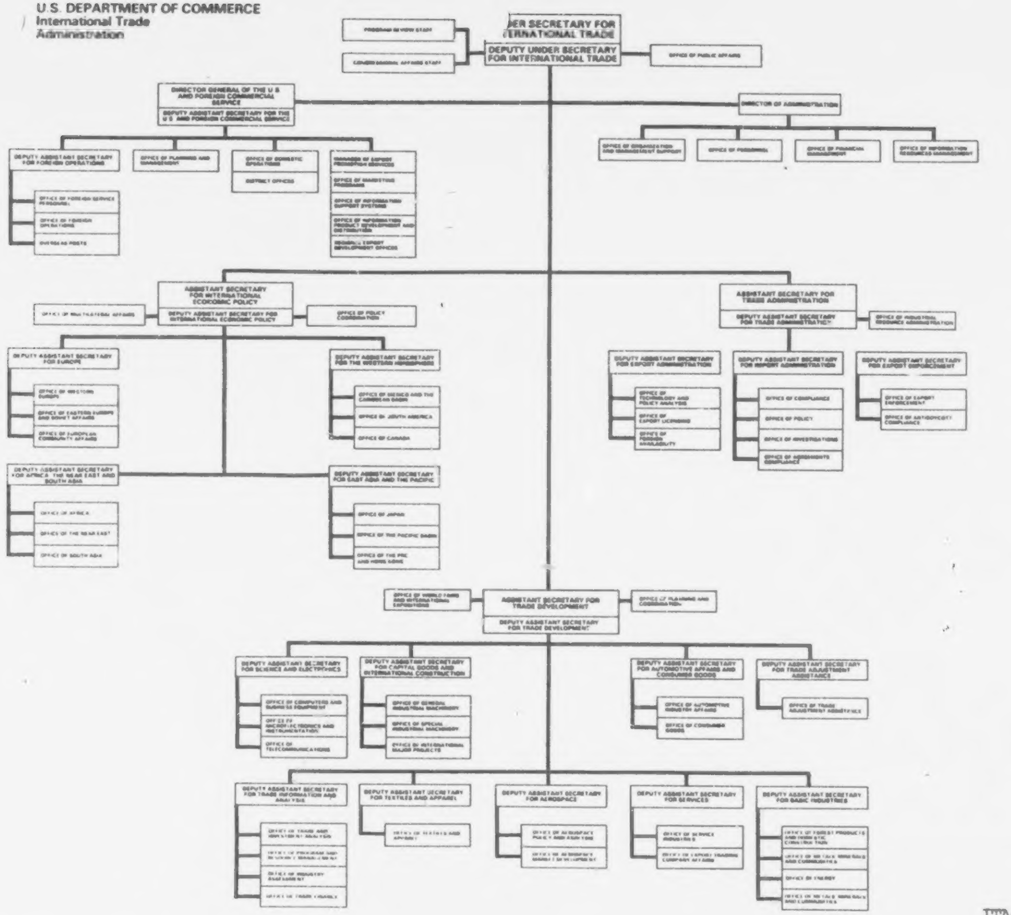
February 1986

U.S. DEPARTMENT OF COMMERCE
International Trade
Administration



ER SECRETARY FOR
TERNATIONAL TRADE
DEPUTY UNDER SECRETARY FOR INTERNATIONAL TRADE
PROGRAM REVIEW STAFF
CONGRESSIONAL AFFAIRS STAFF
OFFICE OF PUBLIC AFFAIRS
DIRECTOR GENERAL OF THE U.S. AND FOREIGN COMMERCIAL SERVICE
DEPUTY ASSISTANT SECRETARY FOR THE U.S. AND FOREIGN COMMERCIAL SERVICE
DEPUTY ASSISTANT SECRETARY FOR FOREIGN OPERATIONS
OFFICE OF FOREIGN SERVICE PERSONNEL
OFFICE OF FOREIGN OPERATIONS
OVERSEAS POSTS
OFFICE OF PLANNING AND MANAGEMENT
OFFICE OF DOMESTIC OPERATIONS
DISTRICT OFFICES
MANAGER OF EXPORT PROMOTION SERVICES
OFFICE OF MARKETING PROGRAMS
OFFICE OF INFORMATION SUPPORT SYSTEMS
OFFICE OF INFORMATION PRODUCT DEVELOPMENT AND DISTRIBUTION
REGIONAL EXPORT DEVELOPMENT OFFICES
DIRECTOR OF ADMINISTRATION
OFFICE OF ORGANIZATION AND MANAGEMENT SUPPORT
OFFICE OF PERSONNEL
OFFICE OF FINANCIAL MANAGEMENT
OFFICE OF INFORMATION RESOURCES MANAGEMENT
ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
DEPUTY ASSISTANT SECRETARY FOR INTERNATIONAL ECONOMIC POLICY
OFFICE OF MULTILATERAL AFFAIRS
OFFICE OF POLICY COORDINATION
DEPUTY ASSISTANT SECRETARY FOR EUROPE
OFFICE OF WESTERN EUROPE
OFFICE OF EASTERN EUROPE AND SOVIET AFFAIRS
OFFICE OF EUROPEAN COMMUNITY AFFAIRS
DEPUTY ASSISTANT SECRETARY FOR THE WESTERN HEMISPHERE
OFFICE OF MEXICO AND THE CARIBBEAN BASIN
OFFICE OF SOUTH AMERICA
OFFICE OF CANADA
DEPUTY ASSISTANT SECRETARY FOR AFRICA, THE NEAR EAST AND SOUTH ASIA
OFFICE OF AFRICA
OFFICE OF THE NEAR EAST
OFFICE OF SOUTH ASIA
DEPUTY ASSISTANT SECRETARY FOR EAST ASIA AND THE PACIFIC
OFFICE OF JAPAN
OFFICE OF THE PACIFIC BASIN
OFFICE OF THE PRC AND HONG KONG
ASSISTANT SECRETARY FOR TRADE ADMINISTRATION
DEPUTY ASSISTANT SECRETARY FOR TRADE ADMINISTRATION
OFFICE OF INDUSTRIAL RESOURCE ADMINISTRATION
DEPUTY ASSISTANT SECRETARY FOR EXPORT ADMINISTRATION
OFFICE OF TECHNOLOGY AND POLICY ANALYSIS
OFFICE OF EXPORT LICENSING
OFFICE OF FOREIGN AVAILABILITY
DEPUTY ASSISTANT SECRETARY FOR IMPORT ADMINISTRATION
OFFICE OF COMPLIANCE
OFFICE OF POLICY
OFFICE OF INVESTIGATIONS
OFFICE OF AGREEMENTS COMPLIANCE
DEPUTY ASSISTANT SECRETARY FOR EXPORT ENFORCEMENT
OFFICE OF EXPORT ENFORCEMENT
OFFICE OF ANTIBOYCOTT COMPLIANCE
ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
DEPUTY ASSISTANT SECRETARY FOR TRADE DEVELOPMENT
OFFICE OF WORLD FAIRS AND INTERNATIONAL EXPOSITIONS
OFFICE OF PLANNING AND COORDINATION
DEPUTY ASSISTANT SECRETARY FOR SCIENCE AND ELECTRONICS
OFFICE OF COMPUTERS AND BUSINESS EQUIPMENT
OFFICE OF MICROELECTRONICS AND INSTRUMENTATION
OFFICE OF TELECOMMUNICATIONS
DEPUTY ASSISTANT SECRETARY FOR CAPITAL GOODS AND INTERNATIONAL CONSTRUCTION
OFFICE OF GENERAL INDUSTRIAL MACHINERY
OFFICE OF SPECIAL INDUSTRIAL MACHINERY
OFFICE OF INTERNATIONAL MAJOR PROJECTS
DEPUTY ASSISTANT SECRETARY FOR AUTOMOTIVE AFFAIRS AND CONSUMER GOODS
OFFICE OF AUTOMOTIVE INDUSTRY AFFAIRS
OFFICE OF CONSUMER GOODS
DEPUTY ASSISTANT SECRETARY FOR TRADE ADJUSTMENT ASSISTANCE
OFFICE OF TRADE ADJUSTMENT ASSISTANCE
DEPUTY ASSISTANT SECRETARY FOR TRADE INFORMATION AND ANALYSIS
OFFICE OF TRADE AND INVESTMENT ANALYSIS
OFFICE OF PROGRAM AND RESOURCE MANAGEMENT
OFFICE OF INDUSTRY ASSESSMENT
OFFICE OF TRADE FINANCE
DEPUTY ASSISTANT SECRETARY FOR TEXTILES AND APPAREL
OFFICE OF TEXTILES AND APPAREL
DEPUTY ASSISTANT SECRETARY FOR AEROSPACE
OFFICE OF AEROSPACE POLICY AND ANALYSIS
OFFICE OF AEROSPACE MARKET DEVELOPMENT
DEPUTY ASSISTANT SECRETARY FOR SERVICES
OFFICE OF SERVICE INDUSTRIES
OFFICE OF EXPORT TRADING COMPANY AFFAIRS
DEPUTY ASSISTANT SECRETARY FOR BASIC INDUSTRIES
OFFICE OF FOREST PRODUCTS AND DOMESTIC CONSTRUCTION
OFFICE OF METALS, MINERALS AND COMMODITIES
OFFICE OF ENERGY
OFFICE OF METALS, MINERALS AND COMMODITIES

ITA-1
NOVEMBER 1983

General Statement

The primary mission of the International Trade Administration (ITA) is to develop the export potential of U.S. Firms in a manner consistent with national security and foreign and economic policy and to promote an improved trade posture for U.S. industry.

Efforts to accomplish this mission are carried out in four activity areas: Trade Development (TD), International Economic Policy (IEP), Trade Administration (TA), and the U.S. and Foreign Commercial Services (USFCS).

The goals of ITA's Trade Development activity are to strengthen the export competitiveness of U.S. firms through sector-based units which conduct program activities that are responsive to the particular needs of discrete sets of industries in the areas of analysis, policy development, negotiations and export promotion; and to provide quality data, research, and analysis on domestic and international industries, trade, finance, and investment in response to the needs of public and private sector decision makers.

The goals of ITA's International Economic Policy activity are to develop regional and multilateral economic policies for trade and investment issues, and provide business counseling and marketing services to help U.S. industries expand their exports. IEP works closely with TD to incorporate an appropriate sectoral dimension in its policy development activities.

The goal of ITA's Trade Administration activity is to enforce our export and import trade laws consistent with national security and foreign policy considerations. It strives to achieve an appropriate balance between the interests of U.S. exporters and national security requirements.

The goal of ITA's U.S. and Foreign Commercial Services activity is to develop and deliver export promotion services to the business community in the United States and overseas, in order to increase the number of new firms exporting and the number of established exporting firms entering additional export markets.

Most of ITA's program activity as described above is funded through the Operations and Administration appropriation to which the balance of this document is addressed. Other ITA activities such as U.S. business' participation in trade fairs and the sale of information products are partially funded through the ITA reimbursable program, including 51 FTE. The following is a comparison of the 1986 appropriation with 1987 estimates and related data on current employment:

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc.(+) or Dec.(-)		Perm.
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Emp. 11/30
Operations and administration.............	2,867	$192,000	2,895	$179,170	+28	-$12,830	2,533

The request for the "Operations and administration" appropriation in 1987 is 2,895 positions and $179,170,000, an increase of 28 positions and a decrease of $12,830,000 from 1986. This request is composed of the following changes:

a)	Adjustments to base and built-in changes which include: a proposed rescission of the Trade Adjustment Assistance program: -$10,890,000 Other increases: +$10,323,000; and Other decreases: -$7,884,000	---	-8,451
b)	Increases in the following programs: Export administration (+13 positions and +$2,215,000); and Import administration (+55 positions and +$2,374,000)	+68	+4,589
c)	Decreases in the following programs: Trade development: Management and policy coordination (-$105,000); Sectoral analysis (-$1,368,000); Trade adjustment assistance (-28 positions and -$5,610,000); U.S. and foreign commercial services: Export promotion services (-12 positions and -$1,371,000); Domestic operations (-$123,000); Foreign operations (-$391,000)	-40	-8,968

Highlights of 1987 Changes

Program Increases

ITA's programs are aimed at increasing U.S. exports worldwide while maintaining a necessary set of foreign policy and national security export controls. Two program enhancements are being proposed for 1987 to help achieve these aims.

- For Export Administration, an increase of 13 positions and $2,215,000 is requested to meet new or expanded statutory requirements resulting from passage of the Export Administration Amendments Act of 1985.
- For Import Administration, an increase of 55 positions and $2,374,000 is requested to (1) meet the increased number of antidumping and countervailing duty petitions since 1980 and the growing complexity of their investigations and (2) support voluntary restraint steel agreements with other countries. This increase is consistent with the President's September 1984 Decision on the U.S. Steel Industry's Section 201 Complaint.

Program Decreases

The following program decreases are being proposed for 1987.

- A decrease of $105,000 is proposed for the Management and Policy Coordination line item of the Trade Development Subactivity. This decrease reflects administrative cost savings.
- A decrease of $1,368,000 is proposed for the Sectoral Analysis line item of the Trade Development Subactivity. This decrease reflects administrative cost savings.
- A decrease of 28 positions and $5,610,000 is proposed as a result of terminating the Trade Adjustment Assistance (TAA) program for firms. This decrease represents the remaining funds after the proposed FY 1986 program rescission of the TAA program.
- A decrease of 12 positions and $1,371,000 is proposed in Export Promotion Services. This amount was primarily devoted to funding activities are being performed better by the private sector. This includes the closing of the Regional Export Development Office in Bonn and the Export Development Offices in Sydney, Australia and Sao Paulo, Brazil. ITA will encourage and make greater use of the private sector to stage ITA sponsored trade promotion events in these markets. Foreign Commercial Service offices in these cities will remain open.

- A decrease of $123,000 is proposed in Domestic Operations at a result of administrative cost savings in the operation of ITA's District Offices.

- A decrease of $391,000 is proposed in Foreign Operations as a result of administrative cost savings in the operation of ITA's overseas Commercial Offices.

Major Reductions, Terminations, or Redirections

The Administration proposes termination of the Trade Adjustment Assistance (TAA) program for firms in FY 1987. This decision is reflected in the proposed FY 1986 rescission of the programs budget authority of $10,890,000, unobligated balance of $9,110,000, and the proposed program decrease in FY 1987 of $5,610,000.

The TAA program is proposed for termination because the fact that a firm has been harmed by import competition should not in and of itself constitute justification for special Government assistance. U.S. trade laws provide remedies against unfair import competition, and default rates suggest that a large proportion of TAA loans and loan guarantees have failed to result in the intended adjustment.

In addition, ITA is restructuring the current budget structure to eliminate Administration as a separate budget activity. All costs formerly shown under the Administration activity will now be spread back to the program areas which they directly support. This change will enable ITA to more accurately reflect the full cost of program activities. This shift is reflected on the Activity/Subactivity Change Crosswalk.

Activity/Subactivity Change Crosswalk
(Dollar amounts in thousands)

Format of Fiscal 1986 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Operations and administration:	
Trade development:	
Management and policy coordination.	$1,216
Sectoral analysis	16,832
Trade information and analysis	8,456
Trade adjustment assistance	---
International economic policy:	
Management and policy coordination.	1,799
Regional economic policy	8,719
Trade administration:	
Management and policy coordination.	611
Export administration	18,631
Industry resource administration	1,436
Export enforcement	9,498
Import administration	12,903
Special import programs	509
U.S. and foreign commercial service:	
Field operations management	7,556
Export promotion services	10,740
Domestic operations	13,616
Foreign operations	35,994
Administration:	
Executive direction	1,843
Administrative services	6,967
Centralized services	21,844
Total	179,170

Format of Fiscal 1987 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Operations and administration:	
Trade development:	
Management and policy coordination.	$1,637
Sectoral analysis	21,920
Trade information and analysis	10,593
Trade adjustment assistance	---
International economic policy:	
Management and policy coordination.	2,363
Regional economic policy	11,463
Trade administration:	
Management and policy coordination..	759
Export administration	23,064
Industrial resource administration..	1,907
Export enforcement	12,746
Import administration	16,065
Special import programs	707
U.S. and foreign commercial services:	
Field operations management	8,650
Export promotion services	12,184
Domestic operations	19,118
Foreign operations	35,994
Total requirements	179,170

Appropriation Language and Code Citations:

1. "For necessary expenses for international trade activities of the Department of Commerce;"

15 U.S.C. 637(e)
15 U.S.C. 649
15 U.S.C. 1501 et seq.
15 U.S.C. 1871
15 U.S.C. 4001 et seq.
15 U.S.C. 4011 et seq.
19 U.S.C. 81a et seq.
19 U.S.C. 1202
19 U.S.C. 1202 nt.
19 U.S.C. 1303
19 U.S.C. 1671 et seq.
19 U.S.C. 1673 et seq.
19 U.S.C. 1862
19 U.S.C. 2031
19 U.S.C. 2155
19 U.S.C. 2354
19 U.S.C. 2411 et seq.
22 U.S.C. 801 et seq.
22 U.S.C. 2451 et seq.
22 U.S.C. 2651 et seq.
22 U.S.C. 3101 et seq.
40 U.S.C. 512
42 U.S.C. 300j
50 U.S.C. 98-98h
50 U.S.C. 401 et seq.
50 U.S.C. app. 2061 et seq.
50 U.S.C. app. 2401 et seq.

15 U.S.C. 637(e) requires the Secretary of Commerce to obtain notice of proposed Federal Government procurements and to publish these daily. ITA publishes the Commerce Business Daily.

15 U.S.C. 649 requires the Secretary of Commerce to establish export promotion centers and authorizes the awarding of grants (including contracts and cooperative agreements) to encourage the development and implementation of small business international marketing programs.

15 U.S.C. 1501 et seq. provides the basic authority for performance of those functions and activities of ITA which promote an improved trade posture for United States industry.

15 U.S.C. 1871 provides the authority for an annual, comprehensive assessment of the state of the automobile industry and its interaction in an integrated economy.

15 U.S.C 4001 et seq., 4011 et seq. (Export Trading Company Act of 1982) requires the establishment of an antitrust certification program and the promotion of export trading companies.

19 U.S.C. 81a et seq. establishes the Foreign-Trade Zones Board and designates the Secretary of Commerce as Chairman and executive officer of the Board.

19 U.S.C. 1202 provides the Department of Commerce with the authority to develop, maintain, and publish a list of bona fide motor-vehicle manufacturers.

19 U.S.C. 1202 nt, provides authority for two import control programs, the Watch Quota program and the Florence Agreement program.

19 U.S.C. 1303 authorizes the investigation as to whether a foreign government has paid or is paying a bounty or grant upon the manufacture, production, or export of merchandise imported into the United States, and, if so, requires the determination and imposition of countervailing duties upon such merchandise. This section is limited to merchandise from a country not covered by the Agreement on Subsidies and Countervailing Measures or from a country which has not assumed obligations similiar to those contained in such Agreement.

19 U.S.C. 1671 et. seq. authorizes the investigation as to whether a foreign government has paid or pays a subsidy upon the manufacture, production, or export of merchandise imported into the United States, and, if so, and if the International Trade Commission finds requisite injury, requires the determination and imposition of countervailing duties upon such merchandise. This section applies to merchandise from countries covered by the Agreement on Subsidies and Countervailing Measures or from countries which have assumed obligations similiar to those contained in the Agreement.

19 U.S.C. 1673 et. seq. authorizes the investigation as to whether foreign merchandise is, or is likely to be, sold in the United States at less than fair value and, if so, and if the International Trade Commission finds requisite injury, requires the determination and imposition of antidumping duties upon such merchandise.

19 U.S.C. 1862 requires the investigation upon request, of the effects on national security of imports of a particular article, and a report of the results of the investigation to the President with a recommendation for action or inaction.

19 U.S.C. 2031 provides the authority to promulgate rules and regulations pertaining thereto under Section 501(2) of Title V of the Automotive Products Trade Act of 1965.

19 U.S.C. 2155 authorizes the President to organize, through the U.S. Trade Representative and the Secretaries of Commerce, Labor, and Agriculture, policy and sector advisory committees composed of representatives from industry, labor, agriculture, and services. These committees provide policy and technical advice on international trade negotiating objectives and bargaining positions, the operation of trade agreements, and with respect to other matters involving the administration of U.S. trade policy.

19 U.S.C. 2354 requires the Bureau of Industrial Economics to prepare studies, reports, and information activities for the Secretary of Commerce in response to investigations and findings of the International Trade Commission under 2251 of Title 19 to determine eligibility for adjustment assistance, except that reports to be submitted to the President shall be issued by the Secretary, and responsibility for assistance in preparation and processing of petitions and applications under Subsection 264 (c) shall be vested in the Assistant Secretary for Economic Deveopment.

19 U.S.C. 2411 et seq. provides procedures for determinations and actions to be taken to enforce the rights of the United States under any trade agreement, or to respond to any act, policy, or practice of a foreign country that is inconsistent with the provisions of any trade agreement, or burdens or restricts United States commerce.

22 U.S.C. 801 et seq., the Foreign Service Act of 1946 establishes rules governing the Administration and operations of the Foreign Service of the United States. Under Reorganization Plan No. 3 of 1979 and Executive Order 12188, the Secretary was authorized to establish and administer the Foreign Commercial Service and to utilize therefore the authorities of the Foreign Service Act.

22 U.S.C. 2451 et seq. authorizes the President to provide for U.S. participation in international fairs and expositions, including trade and industrial fairs and other public or private demonstrations of U.S. economic accomplishments. ITA provides a wide range of trade exhibitions overseas.

22 U.S.C. 2651 et seq. establishes the Department of State and provides authority for a number of overseas operations. Reorganization Plan No. 3 of 1979 and Executive Order 12188 authorize the utilization of certain of these authorities in connection with the operation of the Foreign Commercial Service.

22 U.S.C. 3101 et seq. authorizes the President to conduct surveys and studies of both United States direct investment abroad as well as foreign direct and portfolio investment in the United States. ITA monitors, analyzes, and reports to Congress on specific aspects of international investment which may have significant implications for the economic welfare and national security of the United States.

40 U.S.C. 512 provides authority for the administration of the Foreign Excess Property program.

42 U.S.C. 300j authorizes the issuance of orders requiring the delivery of chemicals or substances necessary for treatment of water.

50 U.S.C. 98-98h authorizes the acquisition and retention of stocks of certain strategic and critical materials.

50 U.S.C. 401 et seq. provides for the development of national emergency plans and preparedness programs.

50 U.S.C. app. 2061 et seq. authorizes ITA to set priorities for performance on defense and energy-related contracts and to allocate materials and supplies which are essential for national defense purposes and for maximization of domestic energy supplies.

50 U.S.C. app. 2401 et seq. provides authority for the regulation of exports for reasons of national security, foreign policy, or short supply problems. It also authorizes implementation of restrictions on compliance with foreign boycotts and other restrictive trade practices.

2. "including trade promotional activities abroad without regard to the provisions of law set forth in 44 U.S.C. 3702 and 3703;"

No Specific Authority

44 U.S.C. 3702 specifies that an executive department may not publish or pay for advertisements without written authority from the head of that department.

The nature of ITA's overseas exhibition program requires maximum flexibility in advertising requirements since exhibitions may be changed, added, or canceled. When such changes take place, advertisements must be placed as soon as possible to inform the local business community. This exception from 44 U.S.C. 3702 will provide the flexibility which is required to effectively advertise for these exhibitions.

44 U.S.C. 3703 stipulates that prices paid for advertising may not exceed the commercial rates charged to private individuals, with the usual discounts.

Since the United States Government does not have sovereign status in other countries and is charged commercial rates without the discounts required by 44 U.S.C. 3703, this exception is necessary to permit contracting in a manner which conforms to the realities of foreign advertising markets.

3. "full medical coverage for dependent members of immediate families of employees stationed overseas;"

No Specific Authority

This language permits the International Trade Administration to extend to certain of its overseas employees the same benefits afforded domestically employed Federal employees and employees of ITA's Foreign Commercial Service in equivalent positions overseas.

4. "employment of Americans and aliens by contract for services abroad;"

No Specific Authority

44 CG 761, OPM guidance, and House Report 89-188 have concluded that Federal agencies must have specific authority to employ personnel by contract. In order to present its overseas exhibitions ITA often requires the use of narrators, demonstrators, receptionists, clerical, and facilities maintenance personnel who speak the language of the host country; are familiar with local practices and procedures; or who only need to be employed for a short period of time. In some cases, however, it is more advantageous to employ U.S. citizens in the host country (generally members of an employee's family) because they have greater familiarity with American methods and, therefore, require less effort to train.

5. "rental of space abroad for periods not exceeding ten years, and expenses of alteration, repair, or improvement;"

No Specific Authority

40 U.S.C. 278a prohibits expenditures for building rental if the rent is more than 15 percent over the fair market value of the premises and prohibits expenses for alterations, improvements, and repairs of rented premises which exceed 25 percent of the rent.

Buildings, pavilions, and space in such structures must be rented for exhibitions. Rental terms are established by fair authorities and may or may not exceed the percentage provision in 40 U.S.C. 278a. Without this waiver, the program may be prohibited from exhibiting at certain fairs which support ITA's trade development objectives. The installation of exhibits in rented buildings requires that certain alterations and improvements be made. To limit expenditures for such alterations and improvements would seriously restrict the quality and effectiveness of the exhibitions.

6. "purchase or construction of temporary demountable exhibition structures for use abroad;"

No Specific Authority

40 U.S.C. 601 prohibits the construction of public buildings except by the Administrator of the General Services Administration. Authority to purchase or construct such demountable structures is necessary to allow ITA to present exhibitions overseas when permanent exhibition facilities are not available. 41 U.S.C. 10a permits the purchase of articles, materials, or supplies in foreign countries when they are to be used in that country.

7. "payment of tort claims, in the manner authorized in the first paragraph of 28 U.S.C. 2672 when such claims arise in foreign countries;"

No Specific Authority

28 U.S.C. 2672 provides for settlement of tort claims for money damages of $2,500 or less against the United States by the head of each federal agency for loss of property or personal injury or death caused by a negligent or wrongful act of any employee of the Government while acting within the scope of his employment in circumstances where the United States, if a private person, would be liable under local law. However, 28 U.S.C. 2680 exempts the settlement of tort claims which arise abroad from the provisions of 28 U.S.C. 2672. The language requested would exempt ITA from 22 U.S.C. 2680 and would cover the settlement of tort claims against the United States which arise in connection with the ITA's trade promotion activities abroad.

8. "not to exceed $253,000 for official representation expenses abroad;"

No Specific Authority

5 U.S.C. 5536 prohibits additional pay, extra allowances, or compensation unless the appropriation explicitly states that it is for such additional pay, extra allowances, or compensation.

9. "awards of compensation to informers under the Export Administration Act of 1979, and authorized by 22 U.S.C. 401(b);"

22 U.S.C. 401(b)
50 U.S.C. app. 2411

22 U.S.C. 401(b) provides for awards of compensation to informers concerning illegal exportation of war materials or other articles in violation of the law, when funds are specifically provided therefor.

50 U.S.C. app. 2411 provides ITA with authority to make investigations and obtain such information as may be necessary to enforce the provisions of the Export Administration Act of 1979.

10. "purchase of passenger motor vehicles for official use abroad and motor vehicles for law enforcement use with special requirement vehicles eligible for purchase without regard to any price limitation otherwise established by law,"

31 U.S.C. 638(a) prohibits the purchase of passenger motor vehicles unless specifically authorized by the appropriation concerned or other law with the exception of those for the use of the President of the United States, the secretaries to the President or the heads of the executive departments.

11. "... to remain available until expended,"

No Specific Authority

31 U.S.C. 718 provides that appropriations are for the service of the current year "unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriation Act in which it is contained makes provision."

12. "provided, that the provisions of the first sentence of section 105(f) and all of section 108(c) of the Mutual Educational and Cultural Exchange Act of 1961 (22 U.S.C. 2455(f) and 2458(c)) shall apply in carrying out these activities."

No Specific Authority

22 U.S.C. 2455(f) provides authority to accept contributions of funds, property and services from foreign governments, international organizations and private individuals, firms, associations, agencies, and other groups in carrying out the activities concerned with exhibits pursuant to the Mutual Educational and Cultural Exchange Act of 1961.

22 U.S.C. 2458(c) provides authorization for all necessary expenditures involved in the selection, purchase, rental, construction, or other acquisition of exhibitions and the necessary supplies therefor.

This phrase provides for extension of this authority and permits ITA to collect funds for use in conducting trade promotion events abroad.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Operations and administration

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			2,867 (2,848)	$192,000
ITA-13	Adjustments to base and built-in changes:				
	Proposed rescission 1986	--- (---)	-10,890		
	Other increases	--- (+47)	+10,323		
	Other decreases	--- (---)	-7,884		
	Subtotal, adjustments to base and built-in changes			--- (+47)	-8,451
	1987 base			2,867 (2,895)	183,549

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Comparison by activity:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
ITA-16	Trade development:										
	Management and policy coordination	30 (34)	$2,367 (2,344)	29 (31)	$1,670 (1,685)	29 (31)	$1,742	29 (31)	$1,637	--- (---)	-$105
	Sectoral analysis	379 (370)	24,058 (24,412)	375 (380)	25,898 (26,187)	375 (380)	23,288	375 (380)	21,920	--- (---)	-1,368
	Trade information and analysis	154 (151)	9,821 (9,919)	152 (160)	10,210 (10,288)	152 (160)	10,593	152 (160)	10,593	--- (---)	---
	Trade adjustment assistance	28 (32)	25,000 (18,623)	28 (20)	16,500 (26,570)	28 (20)	5,610	--- (---)	---	-28 (-20)	-5,610
	Subtotal, TD	591 (587)	61,246 (55,298)	584 (591)	54,278 (64,730)	584 (591)	41,233	556 (571)	34,150	-28 (-20)	-7,083
ITA-23	International economic policy:										
	Management and policy coordination	33 (32)	2,221 (1,963)	33 (39)	2,254 (2,273)	33 (39)	2,363	33 (39)	2,363	--- (---)	---
	Regional economic policy	192 (191)	11,297 (11,527)	190 (190)	10,945 (11,034)	190 (190)	11,463	190 (190)	11,463	--- (---)	---
	Subtotal, IEP	225 (223)	13,518 (13,490)	223 (229)	13,199 (13,307)	223 (229)	13,826	223 (229)	13,826	--- (---)	---

	Comparison by activity:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) Dec.(-) Perm. Pos.	Inc.(+) Dec.(-) Amount
ITA-27	Trade administration:										
	Management and policy coordination..............	12 (11)	$1,040 (672)	10 (10)	$733 (738)	10 (10)	$759	10 (10)	$759	--- (---)	---
	Export administration.......	242 (269)	16,493 (16,222)	277 (285)	22,970 (23,092)	277 (292)	20,849	290 (305)	23,064	+13 (+13)	+2,215
	Industrial resource administration............	32 (30)	1,736 (1,780)	31 (31)	1,826 (1,841)	31 (31)	1,907	31 (31)	1,907	--- (---)	---
	Export enforcement..........	134 (133)	7,214 (7,246)	213 (178)	9,051 (9,138)	213 (211)	12,746	213 (211)	12,746	--- (---)	---
	Import administration.......	181 (203)	10,772 (11,460)	220 (210)	12,805 (12,903)	220 (217)	13,691	275 (258)	16,065	+55 (+41)	+2,374
	Special import programs.....	13 (15)	816 (708)	13 (13)	671 (677)	13 (13)	707	13 (13)	707	--- (---)	---
	Subtotal, TA............	614 (661)	38,071 (38,088)	764 (727)	48,056 (48,389)	764 (774)	50,659	832 (828)	55,248	+68 (+54)	+4,589
ITA-45	U.S. and foreign commercial services:										
	Field operations management.	81 (92)	8,723 (8,124)	78 (78)	8,532 (8,570)	78 (78)	8,650	78 (78)	8,650	--- (---)	---
	Export promotion services...	124 (106)	15,081 (14,930)	123 (123)	14,250 (14,300)	123 (123)	13,555	111 (111)	12,184	-12 (-12)	-1,371
	Domestic operations.........	394 (391)	19,127 (19,531)	389 (394)	18,704 (18,895)	389 (394)	19,241	389 (394)	19,118	--- (---)	-123
	Foreign operations...... ...	706 (699)	33,869 (36,454)	706 (706)	34,981 (34,981)	706 (706)	36,385	706 (706)	35,994	--- (---)	-391
	Subtotal, USFCS...	1,305 (1,288)	76,800 (79,039)	1,296 (1,301)	76,467 (76,746)	1,296 (1,301)	77,831	1,284 (1,289)	75,946	-12 (-12)	-1,885
	Total requirements, ITA.......	2,735 (2,759)	189,635 (185,915)	2,867 (2,848)	192,000 (203,172)	2,867 (2,895)	183,549	2,895 (2,917)	179,170	+28 (+22)	-4,379

Note: Permanent positions in parentheses represent total full-time equivalency and dollar amounts in parentheses represent obligations.

Justification of Adjustment to Base and Built-in Changes
(Dollar amounts in thousands)

	Perm. Pos.	Amount
Proposed 1986 program rescission:		
Rescission of Trade adjustment assistance program	---	-$10,890

Trade Adjustment Assistance (TAA) grants and administration has been proposed for rescission in FY 1986. The proposal would rescind funds for grants to firms adversely affected by increased imports. The rescission is part of an overall proposal to terminate trade adjustment assistance for firms. This proposal includes a reduction of $710,000 under the Balanced Budget and Emergency Deficit Control Act (P.L. 99-177).

	Perm. Pos.	Amount
Other increases:		
Restoration of 1986 pay reduction	---	+771
Full year cost in 1987 of positions financed for part year in 1986	---	+3,030
Within-grade step increase	---	---
Federal Insurance Contributions Act	---	+41
Employees Compensation Fund	---	+22
Rental payments to GSA	---	+2,821
Federal Telecommunications System	---	+171
Penalty Mail	---	+103
Overseas wage and price increases	---	+1,335
Other Services	---	+503
Working Capital Fund	---	+1,526
Subtotal, other increases	---	+10,323

In 1986 the Administration proposed a 5 percent pay reduction ($3,852,000) in Federal employee salaries. The Congress restored 80 percent of the proposed reduction ($3,081,000). An additional $771,000 is requested in 1987 to cover the full year costs of the 1986 absorption.

The 1986 increases in Export and Import administration were lapsed 25 percent. In addition, the Export enforcement increase was lapsed 50 percent. An additional $3,030,000 is required in 1987 to cover the full year costs of these increases financed for part year in 1986. Computation of the annualization of the increases follows:

	FTE	Amount
Annual salary of new positions in 1986	145	$4,303,668
Less 5 percent lapse	-7	-215,183
Full-year cost of personnel compensation	138	4,088,485
Personnel benefits at 11 percent	---	449,733
Full-year cost of personnel compensation and benefits	138	4,538,218
Compensation and benefits included in 1986 budget	-91	-2,696,453
1987 adjustment to base for compensations	+47	+1,841,765
Full year cost of other objects	---	8,813,781
Other objects included in 1986 budget	---	-7,625,781
1987 adjustment to base for other objects	---	+1,188,000
Total 1987 adjustment to base	+47	+3,029,765

An increase of $913,140 is required to fund within-grade step increases in 1986. The full amount is being absorbed. The computation is as follows:

	Foreign Service	GS/GM	Total
Estimated number of within-grade step increases scheduled........	123	1,160	1,283
Step increases not earned due to turnover..........................	5	150	155
Average step above step 1 per separation..........................	3	3	3
Average cost per within-grade step increase........................	$1,425	$961	---
Gross cost of scheduled step increases..............................	$175,275	$1,114,760	$1,290,035
Less savings due to separations.......................................	-21,375	-432,450	-453,825
Subtotal, personnel compensation..............................	153,900	682,310	836,210
Personnel benefits at 9.5%...	14,158	62,772	76,930
Total cost...	168,058	745,082	913,140
Amount absorbed..	-168,058	-745,082	-913,140
1987 adjustment to base..	---	---	---

The increase of $41,000 in FICA taxes is the result of the maximum taxable salary increasing from $41,700 to $43,200 and the medicare health insurance rate increasing from 1.35 percent to 1.45 percent.

The increase of $22,000 in the repayment to the Employee's Compensation Fund is the result of higher costs in the year ending June 30, 1985, than the year ending June 30, 1984. The charges will be reimbursed to the Department of Labor, Employee's Compensation Fund in FY 1986 pursuant to Public Law 86-767, as amended.

The rate increase allowed GSA will increase ITA's cost of currently occupied space in FY 1987. The estimated 1987 base cost of $10,040,000 is $2,821,000 over the 1986 estimate of $7,219,000 and is requested as an adjustment to base.

The increase of $171,000 in Federal Telecommunication System charges is based on a projected rate and usage charge as determined by the General Services Administration.

The United States Postal Service was allowed an overall rate increase of 9.5 percent on Februaury 17, 1985. This requires an additional $103,000 calculated on the FY 1986 estimate of $1,080,000.

The increase of $1,335,000 in the overseas costs of operations is attributable to Foreign Service National (FSN) wage adjustments and price increases overseas for ITA direct operations. The amount of the FSN wage increases ($734,000) has been calculated based on the State Department's annual wage surveys. The surveys are designed to assure that U.S. Government salaries are in line with those paid by local employers. The amounts have been reduced by twenty-five percent to compensate for the effective dates of salary adjustments which do not occur all at one time but rather over the entire year. The amount of overseas price increases ($601,000) were calculated based on anticipated overseas price increase in 1987 in each of the countries in which ITA conducts operations.

The increase of $503,000 is to fund cost increases in domestic contracts and purchased services from a base in 1986 of $10,050,000.

An increase of $1,526,000 is to fund cost increases in the Departmental working capital fund to maintain their current level of operations. These include items such as within-grade step increases, payroll costs, and other adjustments which are beyond the control of the Department.

Other decreases:

Non-recurring technical assistance grant	---	-3,500
Non-recurring developmental costs of ADP systems	---	-4,277
Management savings	---	-$107
Subtotal, other decreases	---	-7,884

In FY 1986, ITA was appropriated a one-time sum of $3,500.000 for a grant to the Tailored Clothing Technology Corporation (TC)[2]. This cost is non-recurring and is a negative adjustment to base.

ITA's 1986 Congressional budget request included an increase of $4,073,000 for the development and implementation of a new Export Control Automated Support System (ECASS); $3,277,000 are the non-recurring costs associated with the systems development. In addition, the Commercial Information Management System (CIMS) will be completed in FY 1986. The non-recurring costs of $1,000,000 associated with the development and implementation will not be required in FY 1987.

These savings include a goal of reducing the cost of positions in grades 11-15 by $107,000. These savings may be achieved by improved overall position management or through other administrative cost reductions.

Justification of Program and Performance

(Dollar amounts in thousands)

Activity: International trade
Subactivity: Trade development

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Management and policy coordination	30 (34)	$2,367 (2,344)	29 (31)	$1,670 (1,685)	29 (31)	$1,742	29 (31)	$1,637	--- (---)	-$105
Sectoral analysis.................	379 (370)	24,058 (24,412)	375 (380)	25,898 (26,187)	375 (380)	23,288	375 (380)	21,920	--- (---)	-1,368
Trade information and analysis....	154 (151)	9,821 (9,919)	152 (160)	10,210 (10,288)	152 (160)	10,593	152 (160)	10,593	--- (---)	---
Trade adjustment assistance.......	28 (32)	25,000 (18,623)	28 (20)	16,500 (26,570)	28 (20)	5,610	--- (---)	---	-28 (-20)	-5,610
Total requirements................	591 (587)	61,246 (55,298)	584 (591)	54,278 (64,730)	584 (591)	41,233	556 (571)	34,150	-28 (-20)	-7,083

Goals and Objectives

Goals: To strengthen the export competitiveness of U.S. firms in the manufacturing and service industries, thereby contributing to increased exports.

Objectives: To increase the number of U.S. firms which export, facilitate U.S. firms' efforts to penetrate or expand into overseas markets with high export potential; and assist U.S. firms to compete successfully for major overseas construction projects and major product procurements.

Base Program

Management and policy coordination--This area provides the central management for Trade Development (TD) through the authority of the Assistant Secretary and Deputy Assistant Secretary for Trade Development. The staff supports the Assistant Secretary and Deputy Assistant Secretary in ensuring policy and program consistency across the various units of TD. This program consists of: (1) the Office of Planning and Coordination, which includes the President's Export Council Staff, and (2) the International Expositions Staff.

o Planning and Coordination--The Office identifies, analyzes, and evaluates major international trade issues; conducts research to identify problems and opportunities facing U.S. exporters; manages assignments for the Assistant Secretary, including reports requested by other agencies; contributes to the overall formulation of TD policy, objectives and programs to further U.S. interests in international trade and investment; and performs specific trade development planning activities. It also provides administrative support for the President's Export Council which reports to the President through the Secretary of Commerce. The Council provides a forum for current and emerging problems and issues in the field of export expansion. The membership of the Council includes Executive Branch officials; members of Congress; and representatives of business, agriculture, labor, and state governments.

o International Expositions--ITA carries out the provisions of P.L. 91-269 relating to Federal recognition and participation in international exhibitions held in the U.S.; and P.L. 97-254 concerning the participation of the United States in the Louisiana World Exposition. Pursuant to that authority, the Assistant Secretary manages Federal participation, designs, and operates the Federal Pavilion and provides staff support to U.S. organizers of other international expositions to obtain registration with the Bureau of International Expositions in Paris, the treaty organization that sanctions world fairs. Responsibilities in connection with the proposed 1992 Chicago World's Fair are dependent upon authorizing legislation and a further appropriation, both in turn dependent on an as yet uncompleted environmental impact study and other factors.

Sectoral analysis--The sector analysis program incorporates seven sector groups--Aerospace, Automotive Affairs and Consumer Goods, Basic Industries, Capital Goods and International Construction, Science and Electronics, Services, and Textiles and Apparel. Each sector group supports increased competitiveness of U.S. industries in world markets through research on and analysis of major trade issues, development of proposed remedial actions/policies, projection of industry trends and performance, liaison with U.S. private sectors, and development of export promotion programs that support foreign market access. Sector program activities are tailored to the specific needs of its industries. Consequently, some concentrate on increasing foreign market access and export promotion while others are equally concerned with the level of import competition in the U.S.

The groups maintain a high level of expertise on the status and prospects of all U.S. industries. They monitor essential data including production, costs, prices, financial and labor conditions, technological changes, distribution, markets, trade patterns, and other factors in order to maintain in-depth professional expertise; perform research and analysis on key issues; support Presidential actions under U.S. trade law; and monitor trade trends, etc., in sensitive industries. This information is disseminated through publications and industry and firm counseling, and is used to support other programs operated by ITA, the U.S. Government and the private sector. Within ITA, TD's sector groups support policy development, export promotion activities, major projects initiatives, and other programs such as industrial mobilization programs, and activities requiring industry-specific technical assistance. The groups prepare appropriate sections of the annual U.S. Industrial Outlook, the monthly Business Conditions Reports and other industrial publications. The groups maintain close liaison with Industry Sector Advisory Committees (ISACs), other government agencies and private sector industry and trade associations.

Specific sector group activities include:

- Preparing briefing papers, publications and other reports to disseminate domestic and international industry information to government and the private sector;

- Participating in domestic export conferences to promote industry awareness of foreign market opportunities;

- Working with the USFCS to plan, organize, and recruit participants for trade promotion events;

- Participating in the development of policy positions and negotiating strategies for use in U.S. Government dealings with international bodies, including multilateral and bilateral negotiations;

- Implementing legislatively mandated trade laws concerning the annual review of the Generalized System of Preferences (GSP) program, import relief cases (national security and injurious competition basis) and analyzing and commenting on proposed product-specific trade legislation;

- Supporting Industry Sector Advisory Committees;

- Collecting, analyzing, and preparing appropriate industry material for the U.S. Industrial Outlook and other publications providing domestic and international industry analyses and forecasts;

- Identifying trade barriers and trade opportunities in order to increase sector industry competitiveness abroad; and

- Preparing Competitive Assessments which produce in-depth, industry-specific, intensive economic analyses on the present and long-term domestic and international competitiveness of specific U.S. industry sectors (e.g., petrochemicals, commercial aircraft, etc.) as well as separate but similar analyses for key cross-industry issues (e.g., impact of R&D efforts).

In addition to these functions which are common to all sectors, certain activities and functions are unique to one or more sectors, as follows:

- Aerospace implements a program to provide early, quality background information, and maximum bid support to U.S. Aerospace companies competing overseas; monitors implementation of the GATT Agreement on Trade in Civil Aircraft and develops the Department's position for international negotiations and discussions relative to that agreement; and in cooperation with the Office of International Finance, develops the Department's position on aerospace sector financing disciplines such as the "Commonline" and the "Standstill" under the auspices of the OECD.

- Automotive Affairs and Consumer Goods publishes, as mandated by the Chrysler Loan Guarantee Act of 1979 (P.L. 96-185), an annual report on the status of the U.S. auto industry. The study is an in-depth analysis of all factors and issues which affect the industry (e.g., regulatory programs, labor and material costs, fuel supplies and costs, Japanese voluntary restraint program, etc.), forecasts trends, and is used by the private sector as well as other Federal agencies as a guide in formulating U.S. policy. The program also serves as the Administration coordinator and spokesperson on auto policy issues (tax, antitrust, domestic content legislation, etc.). It undertakes analytical support on a vast array of policy options that affect the international competitive position of the U.S. automotive and consumer goods industries and provides full services to 128 diverse consumer goods industries.

- Basic Industries prepares and issues a minerals and mining Study mandated by Congress; manages Commerce responsibilities under Public Law 96-482, as amended, the Solid Waste Disposal Act; provides National Security Council (NSC) with Strategic Stockpile substitution analysis; provides Federal Emergency Management Agency (FEMA) with 126 Strategic Stockpile Planning Reports; develops U.S. position on commodities and participates in International Commodity Negotiations concerning world market stabilization and the access to commodities for which the U.S. is critically import dependent.

- Capital Goods and International Construction assists U.S. engineering construction and equipment firms to obtain contracts for major construction projects abroad; works with the staff of the Ex-Im Bank regarding foreign major projects involving U.S. firms and provides advice on these and similar projects to the Department of Commerce representatives on the Ex-Im bank board and on the National Advisory Council; and maintains close contact with the staffs of the several multilateral development banks in support of the international major projects program and general export promotion efforts, and addresses the issues and barriers relating to specific project opportunities through the Interagency Major Projects Coordinating Group.

- Services conducts the Service Industries Development Program, mandated by Section 306 of the Trade and Tariff Act of 1984 (P.L. 98-573), to develop policies to promote the international competitiveness of U.S. service industries, to perform specialized trade promotion analytical and data improvement activities (in conjunction with the data collection agencies) and, beginning in 1987, to prepare a biennial report to Congress on findings and recommendations. Services also promotes and supports the activities and operations of Export Trading Companies (ETC's) made possible by enactment of the Export Trading Company Act of 1982; administers the Title III antitrust certificate of review program, issues guidelines and explanatory materials, identifies groups likely to benefit from the ETC method of organization, counsels firms seeking antitrust certification, maintains a contact facilitation service and coordinates Commerce/Government-wide efforts to promote ETC's.

- Science and Electronics enhances the competitiveness of high technology industries, e.g., computers, telecommunications, electronic components and instrumentation, through assistance and promotion abroad, and attempts to improve the current trade balance in high technology industries by developing trade and public policy alternatives and influencing such issues as export controls.

- Textiles and Apparel provides staff support and participates in negotiations of bilateral textile and apparel import restraint agreements; implements provisions of the bilateral agreements; monitors textile and apparel imports; and provides staff and technical support to the Committee for the Implementation of Textile Agreements (CITA); and determines when disruptive imports require the establishment of quotas. Textiles and Apparel also administers a sector-specific export expansion program which involves exhibitions, trade missions, export seminars, in-store promotions, market research, and a foreign buyer program.

Summary of Workload and Performance Data

	1985 Actual	1986 Estimate	1987 Estimate
MANDATED:			
Evaluative, Analytical or position papers, and reports......	2,500	2,500	2,660
Interagency or international sectoral meetings/negotiations.	400	400	490
Prepare departmental positions and comments on legislation..	320	340	340
Industry Sector Advisory Committee Meetings.................	70	70	73
Competitive assessments (industry sector specific)..........	32	27	22
Textile industry performance reports (imports vs. quotas)...	840	840	840
Mobilization reports and analyses...........................	80	100	100
OTHER INDICATORS:			
Major projects leads disseminated...........................	650	600	600
Major project export sales facilitated ($millions)..........	$300	$350	$360
Trade promotion events (missions, seminars, shows, etc.) recruited and supported (excluding Certified Shows and Textiles export promotion events).........................	100	80	80
Applications processed for antitrust Export Trading Company Certificates of review...................................	50	60	60
Export development plans prepared...........................	---	10	17

Trade information and analysis--The Trade information and analysis program is primarily responsible for macro-economic trade, finance, investment, and cross-industry analyses; cross-sectoral issues and policy analysis; multi-sectoral industrial assessment; and for providing general trade and industry-specific information and publications. TIA serves as the central source of economic, econometric and analytical skills, industry statistics, and trade, finance, and investment data and information needed to supplement the analytical and industry-specific expertise of TD's sector groups. TIA conducts studies on a project-by-project basis, in cooperation with sector units, and provides general statistical data, information, and analysis regarding the impact on industry of alternative policy initiatives. TIA serves as ITA's point of coordination for the conduct of multi-industry studies and cross-organization projects, including management of the competitive assessment program.

TIA conducts policy-oriented research and analysis relating to U.S. foreign trade, finance and international investment, as well as to the competitive performance of U.S. industries in the international marketplace, in order to assist in the Department's efforts to expand and improve the foreign trade and commercial position of the U.S. This research and analysis results in studies and policy papers on U.S. trade and direct investment trends and developments, and on the U.S. international economic position generally. Economic models are developed, modified, and utilized to analyze and forecast U.S. and international trade and economic trends. TIA also develops and implements international trade policies which are aimed at reducing foreign barriers to U.S. exports and which respond to competitiveness problems in the U.S market.

TIA collects, analyzes and distributes data and information in support of TD industry analysts, IEP country analysts, and ITA policy officials on a range of topics which include: international finance and balances of payments, international merchandise trade, foreign direct investment, and international economic performance data at the macro-economic and industry sector levels. Within these broad areas, TIA monitors certain subjects on a continuing basis, while others are investigated to support specific policy initiatives or in response to events and trends in the international economy. Subject area responsibilities include: export financing, LDC debt, international direct investment, export related employment, Industry

Advisory Program initiatives and responsibilities, the Generalized System of Preferences (GSP), the Harmonized Tariff Nomenclature System, trade related legislation and the specific competitive assessments. TIA's information support is provided by a mixture of computer-based delivery systems, microfiche and printed materials. Computer-based information delivery is coordinated with the overall ITA office automation program of ITA Administration. Microfiche and printed materials are distributed and also collected in the Trade Reference Room for the use of ITA analysts, staff from other federal agencies, and the general public--annual visitors exceed 8,000. In addition, TIA is responsible for publishing the U.S. Industrial Outlook, Business Conditions Report, Foreign Direct Investment Transactions in the United States, the U.S. Trade Performance and Outlook and U.S. International Direct Investments annual reports, studies, and papers.

TIA also has responsibility for providing secretariat services and support to the Industry Consultations Program (managed jointly by Commerce and USTR), and for managing the "Invest in the USA" program which supports State Development Agencies and others interested in attracting foreign manufacturing investments to the U.S. and coordinate overseas trade and investment events for state development agencies. Support to the Industry Consultations Program consists of providing control files, mailing lists, arranging meetings, handling correspondence, and otherwise attending to the myriad details of committee management for the 17 Industry Sector Advisory Committees (ISACs), the 2 Industry Functional Advisory Committees (IFACs) and to the Industry Policy Advisory Committee (IPAC).

Summary of Workload and Performance Data

	1985 Actual	1986 Estimate	1987 Estimate
Evaluative, Analytical or position papers, and reports......	90	90	105
Major reports on U.S. international direct investment.......	3	3	3
Industrial Outlook...	1	1	1
State export origin reports..................................	50	50	50
Speeches/ testimony..	45	50	50
Trade and direct investment prospects for LDC Debt Countries	15	10	10
Report on U.S. trade trends and prospects....................	1	1	1
Competitive Assessments (cross-industry issues)..............	3	3	3
Business Conditions Reports..................................	12	12	12
Major Statistical Reports....................................	6	8	8

Trade adjustment assistance--Trade adjustment assistance provides assistance to firms adversely affected by increases in imports. This assistance is provided through direct loans, grants and loan guarantee programs as well as through export promotion activities.

The operations aspect of this program provides overall direction, processing, monitoring and support services necessary to achieve the objectives of the trade adjustment assistance program.

Budget authority of $10,890,000 and the unobligated balance of $9,110,000 in trade adjustment assistance grants and loans have been proposed for rescission in 1986. The rescission is part of an overall proposal to terminate trade adjustment assistance for firms.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Management and policy coordination....................................	29 (31)	$1,742	29 (31)	$1,637	--- (--)	-$105

A decrease is requested for a portion of this program because of reduced expenses for the Expositions Staff in 1987, as no international expositions are planned until 1991.

The object class detail for this decrease follows:

Title	Amount
Overtime	-$4,000
Travel and transportation of persons	-14,000
Printing and reproduction	-29,000
Other services	-50,000
Supplies	-4,000
Equipment	-4,000
Total	-105,000

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Sectoral analysis	375 (380)	$23,288	375 (380)	$21,920	--- (---)	-$1,368

Two decreases are requested for this program as part of the Administration's deficit reduction effort: (1) a reduction of $368,000 to be applied across the Sectoral analysis program and (2) elimination of the Textiles and apparel export expansion program which will save $1,000,000.

The decrease in the Sectoral analysis program will result in slightly reduced dissemination of domestic and international industry information to government and the private sector.

Elimination of the Textiles and Apparel's export expansion program will result in termination of TD participation in most trade promotional events designed to promote sales of U.S. textiles. TD will maintain a smaller program which will be funded by its trust fund, and textiles export promotion will continue as part of the ongoing trade promotion efforts with the U.S. and Foreign Commercial Service.

The object class detail for this decrease follows:

Title	Amount
Overtime	-$3,000
Travel and transportation of persons	-117,000
Transportation of things	-24,000
Communications, utilities and other rents	-447,000
Printing and reproduction	-78,000
Other services	-639,000
Supplies	-31,000
Equipment	-29,000
Total	-1,368,000

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Trade adjustment assistance	28 (20)	$5,610	---	---	-28 (-20)	-$5,610

ITA proposes to eliminate the portion of this program remaining in 1987 after the 1986 program rescission for the following reasons:

- The fact that a firm has been harmed by import competition should not constitute per se justification for special Government assistance. Such special treatment is unfair to firms that have been harmed by domestic competition, or other market-based factors.

- U.S. trade laws provide remedies against unfair import competition. TAA is available to firms even if the import competition was fair -- i.e., not subsidized or dumped.

- Default rates suggest that a large proportion of TAA loans and loan guarantees have failed to result in the intended adjustment.

The object class detail for this decrease follows:

Title	Number of Positions	Annual Salary
Total salaries	-28	-$948,000
Other than permanent		-96,000
Other personnel compensation		-48,000
Total compensation		-1,092,000
Personnel benefits		-117,972
Travel and transportation of persons		-96,000
Transportation of things		-3,000
Printing and reproduction		-40,000
Other services		-205,028
Supplies		-48,000
Equipment		-108,000
Grants subsidies, and contributions		-3,900,000
Total		-5,610,000

Activity: International trade
Subactivity: International economic policy

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Management and policy coordination	33 (32)	$2,221 (1,963)	33 (39)	$2,254 (2,273)	33 (39)	$2,363	33 (39)	$2,363	--- (---)	---
Regional economic policy..........	192 (191)	11,297 (11,527)	190 (190)	10,945 (11,034)	190 (190)	11,463	190 (190)	11,463	--- (---)	---
Total requirements................	225 (223)	13,518 (13,490)	223 (229)	13,199 (13,307)	223 (229)	13,826	223 (229)	13,826	--- (---)	---

Goals and Objectives

Goals: To (1) develop regional and multilateral economic policies which are responsive to trade and investment issues; (2) provide marketing services which will assist U.S. industries to expand their exports; and (3) identify long range trade and investment problems and develop remedial strategies.

Objectives: To (1) advise on the formulation and implementation of U.S. Government international trade, commercial and investment policies from a country-specific or multilateral perspective; (2) support and implement Multilateral Trade Negotiations (MTN) Agreements to provide U.S. industry access to foreign markets; (3) protect and advance U.S. commercial interests by identifying and resolving bilateral economic problems which threaten U.S. economic activity; (4) identify future bilateral and regional trade, commercial and investment problems and formulate solutions; (5) analyze and disseminate country information; (6) support an active program of overseas promotional events to assist U.S. firms in increasing exports; and (7) contribute to effective management of the Foreign operations by overseeing, with U.S. and Foreign Commercial Service management, policy and program activities of the senior foreign commercial officers.

Base Program

Management and policy coordination--This program develops and implements policies related to international trade and investment issues by coordinating the activities undertaken by the regional economic policy element of IEP and providing policy analysis, development, and representational capability for those issues which are cross cutting in nature (e.g. intellectual property rights) and/or which arise in a multilateral context (e.g. the new trade round). In addition, it provides a central management function for IEP through the Assistant Secretary and Deputy Assistant Secretary for International Economic Policy, develops uniform policies for supervising program activities of Foreign operations, and initiates and supervises analyses and policy papers on issues of cross cutting concern.

Staff assigned to the multilateral affairs function coordinate the development of non-sectoral trade and investment policy issues which arise in a multilateral context, including international fora such as the General Agreement on Tariffs and Trade (GATT), the Organization for Economic Cooperation and Development (OECD), and the specialized agencies of the United Nations. The program monitors and implements the Multilateral Trade Agreements in the GATT, including the codes on product standards, government procurement, customs valuations, and import licensing; coordinates ITA efforts to resolve international trade disputes arising under these codes through the GATT mechanism; develops U.S. negotiating positions for the initiation in 1986 of a New Round of Multilateral Trade Negotiations under the GATT, OECD trade and investment issues such as Counter-trade, High-tech trade, trade-related investment measures, and U.S. issues such as the Code of Conduct for multinational corporations; prepares and reviews papers and participates in interagency and international meetings on GATT, OECD, and UN issues; and undertakes policy analyses of issues related to these international organizations.

Summary of Workload and Performance Data

	1985 Actual	1986 Estimate	1987 Estimate
Primary Policy Support			
Briefing papers prepared	770	800	800
Speeches, testimony prepared	85	95	95
Interagency meetings attended	730	735	735
Commissions, bilateral meetings attended	325	328	328
Primary Private Sector Outreach			
Events supported	5	5	5
Special publications prepared	10	10	10
Magazine/Periodical articles written	10	10	10
Seminars organized	15	15	15
Speeches delivered	40	40	40
Business counseling sessions	2,690	2,700	2,700

Regional economic policy--This program develops and implements policies related to promoting U.S. efforts on a regional and bilateral trade basis. After taking into account U.S. business and consumer interests, policy recommendations are developed and U.S. trade, investment and commercial policies and programs are formulated and implemented in the interagency system with primary implementation responsibility lodged in Commerce. Remedial action is taken to maintain the original balance of concessions to the U.S. in previous agreements, and action which is responsive to U.S. objectives and to foreign government initiatives is taken through bilateral negotiations. This program plays an important role in the implementation of the Generalized System of Preferences for developing countries authorized by Title V of the Trade Act of 1974. This program also provides for a continuous study of foreign countries and regional groupings to develop and maintain an in-depth knowledge of the structures, problems, workings, and directions of their economies as they affect U.S. economic interests. IEP country specialists identify short and long-term foreign developments and measures which affect U.S. commercial relations with countries and regional economic groupings. Additional program responsibilities include participation in the interagency formulation of policy guidance for consultations and representations with regional groups such as the European Community (EC) and the European Free Trade Area or with multilateral fora such as GATT, OECD, and UNCTAD.

As a part of this policy development and implementation process, IEP regional managers (Deputy Assistant Secretaries) supervise policy and program activities of senior foreign commercial officers. Specific supervisory responsibilities include: day-to-day contact between the country desks and the foreign commercial officers on a worldwide basis; knowledge of post activities; and oversight of senior foreign commercial officers' activities related to program implementation. The country desk and the foreign commercial post coordinate resources to produce reports, make representations, and implement trade promotion activities. In addition, this program has responsibility for participating in the development and management of a Post Commercial Action Plan (PCAP) for 125 foreign commercial posts in conjunction with ITA units and other Federal agencies. Through the PCAP, the regional Deputy Assistant Secretary participates in the country goal-setting process for each foreign commercial post and participates with the Director General of the U.S. and Foreign Commercial Service in evaluating Senior Commercial Officer (SCO) performance against these goals.

Country specialists provide to government officials policy analysis and policy recommendations. The policy analysis aspect of this program examines general economic data such as market growth rates, import/export trends, and tariff and non-tariff and investment barriers affecting U.S. sales, economic development plans, likely host government and private sector purchasing patterns, distribution channels and credit practices, and the competitive position of our leading foreign trading partners. Plans are prepared to reduce barriers to U.S. market access in countries of greatest U.S. export potential. This program also identifies and maintains information concerning the activities of individual foreign companies and host government decisions affecting the marketing opportunities of individual American suppliers. Information is assembled from a wide range of sources including diplomatic and intelligence reports, private and government publications, officials and business travelers, and ITA's foreign market research program. This information provides a data source which enables the country specialist to develop comprehensive analysis and recommendations for senior policy officials. As a corollary to this effort, country specialists perform a variety of functions designed to assist the U.S. business community to enter world markets or expand sales in existing markets. Drawing upon their expertise in foreign trade and investments policies and practices, country specialists are responsible for contributing to program recommendations and participating in the development of ITA's overseas trade promotion activities, including designation of markets as appropriate for special emphasis. Also, country specialists develop comprehensive plans for major trade exhibitions overseas, trade missions and catalog shows. These plans are utilized within ITA and made available to private sector participants in ITA trade promotion events. In addition, country specialists provide economic and commercial background information on their countries to other government agencies and Congressional committees and staff. Where appropriate, country specialists develop for publication commercial and marketing information useful to the private sector. Often the private sector provides information to the country specialists on foreign commercial posts pertinent to policy questions or to injurious foreign country practices. On the basis of such information, the country specialist, as appropriate, formulates policy initiatives and makes recommendations for appropriate governmental actions aimed at advancing U.S. policy interests or redressing these grievances. Regional economic policy devotes considerable resources to the business outreach program. Approximately two-fifths of regional time and effort are devoted to business outreach programs. A significant portion of the program is business counseling where country specialists annually respond to nearly 120,000 inquiries.

The program also supports implementation of MTN tariff and non-tariff agreements through monitoring and analysis of individual foreign government policies and practices, and develops information concerning foreign government practices affecting MTN commitments; provides secretariat support for bilateral commissions on trade and commercial relations for which the Department is responsible (These commissions are jointly chaired by senior U.S. and foreign government officials and provide fora for the discussion, negotiation and resolution of bilateral trade and commercial problems. High-level trade and investment missions are also organized and staffed on a periodic basis which offer exceptional exposure and opportunities to U.S. companies); maintains operational responsibility for the U.S.-Japan Trade Facilitation Committee which seeks to eliminate access barriers to the Japanese market for U.S. goods and services, assist U.S. industry in increasing its export performance in Japan, and provide a forum for discussing broad trade issues between the U.S. and Japan; and prepares briefing materials and coordinates with other agencies and foreign governments for the Secretary's involvement in joint economic commissions and ministerial consultations.

In 1980 the National Center for Industrial Science and Technology Management Development, Dalian, China (Dalian Center) was established under the Department of Commerce-People's Republic of China (PRC) Protocol on Cooperation in Management of Science and Technology (which falls under the U.S.-China Science and Technology Agreement). Through the Center, the Department provides management training to PRC enterprise managers, R&D administrators, government officials, and university professors. The program has had a long-term positive impact on U.S.-China relations with substantial benefits accruing to both sides, and is considered the premier example of a U.S.-PRC cooperative program. The Dalian Center promotes pro-U.S. attitudes among current and future leaders in the Chinese Government, industry and education. It enhances opportunities for U.S. exports to China since graduates become leading decision makers in PRC organizations purchasing equipment and technology from abroad. The Center also serves as a window for the U.S. to gain insights into the Chinese economy.

As a result of the success of the Dalian Center, a new five-year Protocol was signed by the Under Secretary for International Trade, during President Reagan's visit to China in April 1984. This Protocol significantly expands cooperation in the field of management of industrial science and technology at the Dalian Center to include a base program with a nine-month curriculum for 200-250 mid- to upper-level managers, with emphasis on economic planning, decision making, and operations management; a Senior Executive Program, which consists of a seven-week course for 40-50 senior executives, with emphasis on macro economic planning and management; and a Young Executive Program with a three-year program which will lead to an MBA degree granted by a U.S. university.

Summary of Workload and Performance Data

	1985 Actual	1986 Estimate	1987 Estimate
Primary Policy Support			
Briefing papers prepared	4,400	4,445	4,445
Speeches, testimony prepared	515	520	520
Interagency meetings attended	2,395	2,410	2,410
Commissions, bilateral meetings attended	685	695	695
Primary Private Sector Outreach			
Events supported	865	880	880
Special publications prepared	425	425	425
Magazine/Periodical articles written	820	825	825
Seminars organized	480	500	500
Speeches delivered	400	410	410
Business counseling sessions	118,650	119,750	119,750

Activity: International trade
  Subactivity: Trade administration

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Management and policy coordination	12	$1,040	10	$733	10	$759	10	$759	---	---
	(11)	(672)	(10)	(738)	(10)		(10)		(---)	
Export administration.............	242	16,493	277	22,970	277	20,849	290	23,064	+13	+$2,215
	(269)	(16,222)	(285)	(23,092)	(292)		(305)		(+13)	
Industrial resource administration	32	1,736	31	1,826	31	1,907	31	1,907	---	---
	(30)	(1,780)	(31)	(1,841)	(31)		(31)		(---)	
Export enforcement................	134	7,214	213	9,051	213	12,746	213	12,746	---	---
	(133)	(7,246)	(178)	(9,138)	(211)		(211)		(---)	
Import administration.............	181	10,772	220	12,805	220	13,691	275	16,065	+55	+2,374
	(203)	(11,460)	(210)	(12,903)	(217)		(258)		(+41)	
Special import programs...........	13	816	13	671	13	707	13	707	---	---
	(15)	(708)	(13)	(677)	(13)		(13)		(---)	
Total requirements................	614	38,071	764	48,056	764	50,659	832	55,248	+68	+4,589
	(661)	(38,088)	(727)	(48,389)	(774)		(828)		(+54)	

Goals and Objectives

Goal: To safeguard the national interest through effective administration of U.S. trade laws.

Objectives: Pursuant to the Export Administration Act (the Act) of 1979 as amended, the objectives of this activity are to develop, implement and enforce export controls for reasons of national security, foreign policy and short supply, and to oppose restrictive trade practices or boycotts; assure the availability of industrial resources for national emergencies; maintain an adequate flow of materials essential for national defense, energy, and other selected priority programs; process and complete investigations and annual reviews within the statutory time limits of the antidumping and countervailing duty (AD/CVD) trade laws; monitor and enforce bilateral steel arrangements with foreign governments; and administer the Foreign Trade Zones and other special import programs.

Base Program

Management and Policy Coordination--This function controls the development, analysis, coordination and consolidation of policy initiatives and responses. It is a multipurpose mechanism to identify and analyze issues that require new policy determinations or challenge existing policy determinations. It monitors and coordinates the preparation of studies, reports, Congressional testimony and other items addressing those issues; directs, coordinates and monitors Trade Administration (TA) participation in interagency staff activity and represents TA in this activity when appropriate; develops and reviews policy options and recommendations on current issues; and coordinates the analysis, implementation, and feedback of new emerging issues.

Export administration--EA exercises licensing jurisdiction over the export of dual-use commodities and technical data from the United States and the reexport of these commodities and technical data from other foreign destinations. Exports licensed by EA are controlled for foreign policy, and national security reasons. EA controls the export of all commodities and technical data within its jurisdictions by requiring validated licenses, general licenses or special licensing procedures.

Export license applications are received and processed by EA. The licensing function includes: (1) interpreting and applying policies and procedures in the review and analysis of export license applications; (2) documenting (for interagency consideration) proposed export transactions posing significant technical and/or policy problems; (3) conducting technical and foreign availability analysis of products to determine and recommend the extent of controls to be applied; (4) referring license applications to OEE for enforcement review. (5) processing emergency applications; (6) preparing reports on export control activities that are submitted to the President and Congress; (7) developing and publishing export control regulations and procedures; (8) maintaining a public contact office and rendering support for ten formal Government/Industry Technical Advisory Committees chartered under the Act; and (9) issuing export licensing guidance for the Office of Export Enforcement, Customs Service agents, and Foreign Commercial Service Officers.

Most applications for individual validated licenses for Free World destinations are licensed promptly upon receipt. The complex Free World cases where diversion of strategic goods to an adversary is of concern or where there are foreign policy or nuclear non-proliferation concerns require more detailed analysis and thus require more time to process. Some cases must be transmitted to the Paris-based Coordinating Committee on Multilateral Export Control (COCOM). The Office of Export Licensing performs this function and liaisons with the U.S. delegation to COCOM and the State Department on all COCOM cases.

Applications for special licenses include service supply, service facility, project, aircraft and vessel repair, general license GTE and distribution licenses. Foremost of these is the distribution license now held by over 700 firms permitting shipments of products to and among 20,000 consignees. Because of the high volume of shipments and extended life of these special licenses, EA has an extensive and increasing foreign and domestic compliance review process conducted by the Office of Export Licensing.

The Operating Committee is an interagency consulting group (Office Director level) chaired by Commerce with members from State, Defense, Energy, Treasury, and the intelligence community. The function of this Committee is to resolve difficult and precedent-setting licensing cases which require interagency agreement. EA's responsibilities under this committee continue to expand due to the increasing technical complexity of cases, increased emphasis on foreign policy factors, and the requirements imposed by Congress for the continuous review and justification of U.S. export control policy toward individual countries. If agreement cannot be reached at this level, cases are escalated to an Assistant Secretary level Advisory Committee on Export Administration. If necessary cases can be escalated to a Secretarial level committee or to the President. The Exporter Assistance Staff which is part of the Office process of Export Licensing (OEL) provides the primary contact with the export community. The Staff provides basic informational services for exporters including information on regulations and procedural issues. Status checks on licenses are provided by the licensing branches of OEL themselves. The Exporter Outreach Staff (of OEL) conducts seminars and correspondence courses for exporters. The Office of Technology and Policy Analysis provides explanations of complex policy issues, is responsible for the maintenence and update of the Export Administration Regulations, and distributes information publications..

The Office of Export Licensing (OEL) is responsible for processing export licenses. The office is divided into two divisions (and a third processing division), the Individual Validated Licensing Division and the Special Licensing Division (SLD). The IVLD processes all individual export licenses, for all commodities and all destinations. The SLD processes all special licenses (e.g. Distribution, Project, Service Supply). OEL receives input from the Office of Foreign Availability which determines the ability of non-U.S. sources to manufacture or provide for export products or technology of comparable quality and sufficient quantity to products or technology whose export is controlled by the U.S. or the Coordinating Committee (COCOM) and from the Office of Techonology and Policy Analysis which helps on precedent-setting cases. OEL is also supported by the Automated Information Staff (AIS), which reports to the Deputy Assistant Secretary for Export Administration. AIS is responsible for providing timely and accurate licensing information, reports, case histories, effective recordkeeping and management data.

Summary of Workload and Performance Data

	1985 Actual	1986 Estimate	1987 Estimate
License Applications Processed:			
Free World:			
Receipts	118,000	125,000	133,100
Approvals	98,005	118,000	124,000
Rejections	565	1,400	1,600
Returned Without Action	22,143	16,800	19,200
Average License Processing Time (Days)	21	28	25
Bloc:			
Receipts	3,171	3,500	4,000
Approvals	2,144	2,550	3,000
Rejections	254	350	400
Returned Without Action	996	500	500
Average License Processing Time (Days)	85	85	85
Distribution Licenses:			
Currently Held	702	698 1/	700
Audits	55	125	140
Average License Processing Time	120	90	60
Appeals of Decisions Processed	77 2/	10 3/	10
Appeals Under Section 10	120	110	110
Exodus Referrals Processed	2,068	2,000 4/	2,000
Other Country COCOM Referrals	1,488	1,850	1,850
Foreign Availability			
Product Class Studies	18	24	32
Commodity Classifications and Advisory Opinions	1,600	1,700	1,750
FOI Requests	43	50	50
Technical Advisory Committee Meetings	73	80	80
EAR Clarification/Simplification/Revisions	40	200	200
Export Information and Services			
Telephone Inquiries	187,500	250,000	250,000
Walk-in Business Counseling	13,125	15,000	15,000
Preparation of Controlled Correspondence	646	600	600
Responses for Overseas Cables and Commercial Telexes.	686	600	600
Commodity Classifications			
Completed	1,600	1,700	10,400
Processing Time (# of Days)	270	30	15
Percentage of COCOM Country Cases			
Processed in under 15 Days	77%	87%	93%
Foreign Availability			
Assessments	18	24	32
Licenses Reviewed	0	15,000	15,000
Reports to Congress*	51	51	51
Classified Reports Received	48,750	48,750	65,000
Classified Reports Reviewed	36,500	48,750	65,000
Non-COCOM Country Negotiations			
Negotiations held with Third (Non-COCOM) Countries	1	2	15
Negotiations held with COCOM	2	0	5
Foreign Policy Controls:			
Reports to Congress	2	0	5
Economic Impact Studies	0	0	12

1/ This figure is based on an 18-22% reduction due to more exacting requirements of the new Distribution License Regulations effective July 1985.

2/ The implementation of the Militarily Critical Technologies List will result in an increased number of West-West license applications being denied.

3/ The Export Administration Ammendments Act (1985) changed the criteria for submission of appeals to export licensing decisions. This new criteria will drastically reduce the number of appeals processed.

4/ Under the Customs Exodus program, export shipments are detained when there is reason to believe they are being exported in violation of export control policies or procedures. These cases receive expedited handling within Commerce, and Customs is advised whether to release or seize the shipments.

Note: Average License Processing Times are based on 100 percent of the applications being processed.

* These reports are a new requirement of the EAAA. As these reports are mandatory, they will be completed with or without an increase in staff, what will suffer as a result of no increase is the number of licenses reviewed, and the number of classified reports reviewed.

Industrial resource administration--This program has responsibility for overall national security preparedness programs and is carried out by the Office of Industrial Resources Administration (OIRA). Program areas meet this responsibility by identifying bottlenecks to industrial production in the event of a defense mobilization and recommending trade actions when the level of imports of a critical commodity threatens to impair the national security by reducing our production base (industrial mobilization capacity); allocating critical industrial resources to meet military requirements (priorities and allocations); administering export controls on items in domestic short supply (export controls); evaluating the implications of changes in existing export controls; identifying and training skilled industry experts to be available to assist the federal government under crisis conditions (National Defense Executive Reserve (NDER)) and planning for the continued operation of the Federal government in a national emergency (emergency preparedness); analyzing the effect of military offset agreements on U.S. industrial competitiveness (military offsets) assuring that the National Defense Stockpile has the appropriate mix of critical materials, on which we are import-dependent, for use in a national emergency (stockpile); and by promoting industrial mobilization cooperation among our allies (North Atlantic Treaty Organization).

Defense Industrial Production: A two-fold approach has been developed to meet the responsibility of assuring that an industrial surge capability is maintained to support our national defense. The first approach is through the preparation of industry evaluations which identify bottlenecks to the production of critical commodities and which assess the capacity of critical industries which have suffered reductions in capacity through unfair trade practices and protectionism abroad, domestic industry practices and other macroeconomic conditions. These studies focus on any deficiency in our industrial capability which would hinder our ability to mobilize in a crisis. Recommended actions to remove these bottlenecks and improve our mobilization production capacity are then forwarded to senior policy officials for consideration. The second approach is through our responsibility, under Section 232 of the Trade Expansion Act, to investigate whether imports of a commodity are entering in such quantities or under such conditions that the production base of key U.S. industries, which are essential to national security, will irrevocably decline. Such an investigation may be initiated by the Department or by private industry. On the conclusion of such an investigation, a report is forwarded to the President with a recommendation as to whether a trade action is warranted for that industry.

Priorities and Allocations: Under Title I of the Defense Production Act, the priorities and allocations system ensures that the military can obtain the resources and products needed for national defense, both now and in time of crisis. It assures that industry assigns priority to the production of military hardware and other defense items over the manufacture of items less critical to national security. While one of the reasons for having the system in place is to enhance our ability to spur industrial activity during a mobilization or war, all defense procurement currently uses this priority system to keep defense programs on schedule and to limit cost overruns.

Export Controls: Export monitoring and/or controls on materials in potential or actual short supply ensure that the domestic economy and industrial base are protected from shortages of critical materials. These controls, under the authority of the Export Administration Act of 1979, as amended, are also designed to reduce the inflationary impact of foreign demand, which could reduce the ability of private industry to mobilize production in a crisis. Commodities currently subject to such controls include crude oil and Western Red Cedar. Under Section 126 of the Export Administration Amendments Act of 1985, this program must submit a report to Congress with a comprehensive review of the issues involving possible changes in the existing incentives to produce crude oil from the North Slope of Alaska and possible changes to export restrictions which would allow crude oil exports at free market levels and 50, 100, 200, and 500 million barrels per day levels.

Military offsets: Under the Defense Production Act (DPA) of 1984, the President must report to Congress on the effects of military offsets on industrial competitiveness, defense preparedness, employment and trade of the United States. This program has proposed the industrial competitiveness chapter of the first report to Congress in October, 1985. (This authority was delegated by the White House.)

Emergency Preparedness and NDER: OIRA's emergency preparedness responsibilities are met by establishing readiness plans, for use by both government and selected private industry personnel, for the emergency control of industrial production and distribution to meet national security needs and to ensure the continued operation of the federal government in the event of a national emergency. Senior business officials are recruited to serve in the National Defense Executive Reserve as senior managers, should a crisis prompt the President's request that they do so. Each reservist is trained by OIRA staff to assume the responsibilities of government personnel presently employed in each of the government agencies, should the need arise. The training of DOC personnel through defense readiness exercises is also provided by OIRA to ensure that our agency can respond appropriately in a national emergency.

Stockpile: The United States relies in part on insecure sources of foreign supplies of materials of strategic importance to national defense. The maintenance of a National Defense Stockpile of such materials insures against supply cut-offs should an interruption or interdiction of such imported materials occur. OIRA provides industry expertise and guidance on stockpile priorities, purchase specifications and storage requirements to the Federal Emergency Management Agency, which has responsibility for coordinating the Annual Materials Plan. This program is also responsible for drafting papers on the likely market impacts of sales of stockpile materials and for preparing reports assessing the vulnerability (economic,political and strategic) of U.S. dependence on foreign material supplies.

NATO: Industrial preparedness is not a unique U.S. responsibility. There is a critical need to consult and cooperate with our NATO allies in developing policies and plans that relate to the alliance's collective security. Representing the U.S. on NATO's Industrial Planning Committee, OIRA assists in developing plans for cooperation in the management and use of industrial resources for mobilization emergencies.

These plans include providing for information systems to coordinate industrial responses in an emergency, analyzing the capabilities of critical industries to surge production for mobilization, and coordinating industial mobilization training exercises among NATO members.

Summary of Workload and Performance Data

	1985 Actual	1986 Estimate	1987 Estimate
Priorities Assist and Rating Authorizations Issued..........	1,800	1,725	1,650
Industry Evaluations Conducted..............................	30	30	40
Stockpile Material Analyses Conducted.......................	150	155	160
Stockpile Technical Documents Prepared......................	11	8	8
NDER Training Conferences Held..............................	16	13	12
Regulatory Audits, Compliance and Training Actions	120	110	100
U.S. Preparedness Plans.....................................	12	11	10
International Preparedness Planning Studies.................	11	10	10

	1985 Actual	1986 Estimate	1987 Estimate
Section 232 Investigations....................................	1	2	2
Short Supply Export Licensing Actions........................	1,057	110	110
Industrial Mobilization and NATO Exercises..................	9	9	8
Trade-Offset and Co-Production Assessments..................	2	10	10

Export Enforcement--This program seeks to detect and prevent the export of controlled commodities and technical data in violation of the EAAA and to enforce the EAAA's prohibition of participation in unsanctioned boycotts against countries friendly to the U.S. The major objectives of this program include: (1) increasing the number of criminal and administrative actions against suspected violators (2) improving the proficiency of enforcement personnel in interdicting illegal exports and in investigative activities through specialized training, more timely use of intelligence and by providing agents with better law enforcement equipment and facilities; (3) effective targeting of enforcement efforts through improved intelligence capabilities; (4) promoting greater enforcement cooperation among COCOM members; (5) reducing export violations through an aggressive public awareness program that encourages government/industry cooperation by educating the public on the penalties for violations and the methods and techniques for avoiding violations; (6) improving the cost-effectiveness of government-wide export enforcement efforts by emphasizing the use of automated data processing and through improved communications and coordination with other government agencies; and (7) reducing U.S. business cooperation with foreign boycotts through an enhanced public awareness program geared to improving the understanding of regulations and by increasing the ability of the Office of Antiboycott Compliance to deal with more complex violations of the law.

Export control enforcement and antiboycott compliance functions are mandated by the Export Administration Act of 1979, as amended (the Act). The Department of Commerce has primary responsibility for the administration of the Act. The efforts of the Department's Office of Export Enforcement are dedicated to enforcement of export controls, while the efforts of the Department's Office of Antiboycott Compliance are solely dedicated to enforcement of the Act's antiboycott provisions.

Effective enforcement of the Act is vital to our national security and foreign policy interests, encourages fair international trade practices and prevents a drain of materials which are domestically in short supply.

Investigation of suspected violations of the Act is a strong thrust of this program. Investigations are supported and supplemented by the gathering, evaluation and dissemination of intelligence information to direct and focus investigative efforts and to support the review process of export license applications; encouraging enforcement multinational cooperation approach through COCOM and with third countries and investigations of industry/trade practices for evidence of participation in or conformance with foreign boycott initiatives.

Investigative activities to detect violations are carried out by personnel from the Washington, D. C. Headquarters Office of Export Enforcement, its field offices located in major exporting/technology centers in the U.S and by the Washington, D.C., Office of Antiboycott Compliance. Export control enforcement is supported by port cargo inspections by Treasury's U.S. Customs Service resulting in detentions and seizures of suspected illegal exports. Further, export control enforcement is coordinated with this and other Federal agencies, such as the FBI, the State Department and the intelligence community, with supportive activities defined in memoranda of understanding. For instance, penalty recommendations are sought from OEE by Customs where goods are seized by that agency. Export control intelligence activities are carried out to detect potential illegal exports or diversions. This is done through pre-license and post-shipment checks and frequently result in rejection of license applications and/or initiation of investigations. To stimulate and encourage cooperation of foreign governments in supporting U.S. export control enforcement efforts, meetings with COCOM members and third countries bilaterally and multilaterally, are initiated and/or attended frequently.

Antiboycott activities involve review and analysis of reporting data received from recipients of boycott-related requests for action and the pursuit of investigative leads developed through audits, private informants and other sources of information.

Support of the exporting community is enlisted through public information efforts involving dissemination of written materials explaining the export enforcement and antiboycott programs and participation in public seminars dealing with the application of the law and regulations.

Suspected violations of the export control provisions of the Act and Regulations are referred to the Department's Office of the General Counsel or the Department of Justice for appropriate administrative or criminal action (or both). Sanctions include the imposition of criminal fines and/or imprisonment, administrative fines and export denial orders. Suspected violations of the antiboycott compliance provisions of the Act and regulations are normally settled with the Office of Antiboycott Compliance. Those not settled are referred to the Department's Office of General Counsel for administraive action or referred to the Department of Justice for criminal action.

Summary of Workload and Performance Data

	1985 Actual	1986 Estimate	1987 Estimate
Export Enforcement Program:			
Investigations closed (Admin/Crim. action completed).....	306*	125	175
Cases referred to Justice Dept. for Criminal action......	30	30	40
OEE cases (Formal/Informal Referrals)..................	25	15	20
Joint OEE/Customs cases (Formal/Informal Referrals)..	10	15	20
Cases referred to OGC for Administrative action..........	40	60	100
Denial Orders issued (temporary, final & amendments).....	14	20	30
Parties denied export priviledges........................	76	90	120
Seizure penalty recommendations (to Customs).............	626	550	550
Pre-license checks initiated.............................	1,677	1,300	1,600
Pre-license checks completed.............................	1,321	1,200	1,500
Post-shipment checks completed...........................	48	150	180
License applications not approved due to OEE review:			
From enforcement review............................	315	550	600
From pre-license screening.........................	208	350	400
Export value of above disapproved license applications:			
From enforcement review (000 omitted)................	254,984	448,000	500,000
From pre-license screening (000 omitted).............	526,992	287,000	300,000
Boycott report processed.................................	22,000	22,000	22,000
Investigations completed.................................	240	200	250
Warning letters issued	83	100	100
Reporting notice advisory letters prepared	300	300	300
Administrative fines imposed (000 omitted) *.............	$518	$700	$800
Cases referred to OGC for administrative action..........	3	3	4
Consent Agreements entered...............................	35	40	50

* Many of these investigations were carryovers from previous years that have been closed out. Criteria for open investigations has been tightened up. Similar cases (resulting in large carryover figures) will not be initiated.

Import administration--The goal of this subactivity is to protect American industry from injurious and unfair trade practices by administering efficiently, fairly, and in a manner consistent with U.S. international obligations, the Antidumping and Countervailing Duty (AD/CVD) laws of the United States; the U.S.-European Economic Community Arrangement and other steel trade arrangements under the President's policy for the steel industry.

The major objectives of this subactivity are to process and complete investigations and annual reviews within the statutory time limits of the new trade laws and implement the new requirements of the Trade and Tariff Act of 1984 (The Act). This program is comprised of three principle program areas: AD/CVD investigations, AD/CVD Compliance, Agreements Compliance and AD/CVD policy. They administer the AD/CVD laws, as intended by the Act, and in a manner consistent with overall U.S. trade policy.

The program responsible for the conduct of investigations in cases where there is reason to believe that imports are being subsidized or being sold in the United States at less than fair value is vested with the Office of Investigations. Affirmative determinations, supported by injury determinations made by the International Trade Commission, can result in antidumping or countervailing duty assessments which are then collected by the Customs Service. This program, which is the primary contact for petitioners, is responsible for the analysis and evaluation of petitions and for recommending, on the basis of information available to it, whether or not a countervailing duty or antidumping investigation should be initiated.

Through its accounting function, the Office of Investigations also provides expertise in the areas of 1) the financial, accounting and verification aspects of AD/CVD cases, including reviewing respondents' submissions, conducting the on-site verifications, analyzing issues, and developing positions; and 2) overall financial and accounting guidance in the administration of the AD/CVD laws.

Cases vary in terms of scope and complexity and timetables must be strictly adhered to in the conduct of AD/CVD investigations. Procedures generally include an analysis of the petition and notifications to interested parties and governments; initiation of the investigation, including the preparation and presentation of questionnaires; analysis of responses to questionnaires and on-site verification of the information provided; calculations of estimated subsidies or dumping margins; preparation of preliminary and final determinations; and preparation of Federal Register notices explaining each determination.

Once an investigation has been completed and an antidumping or countervailing duty order issued or suspension agreement accepted, the monitoring and annual review of the order or agreement becomes the responsibility of the Office of Compliance. The Act requires that requested annual reviews of all outstanding antidumping and countervailing duty orders be conducted in order to adjust the dumping and countervailing duty margins, to instruct the Customs Service of the amounts of antidumping and countervailing duties Customs should assess, and to set and instruct Customs of the cash deposit of estimated antidumping and countervailing duties to collect on future imports. Similar activities are required for suspension agreements, except for the assessment and deposit steps. The process of review involves essentially the same tasks as those described for the investigation program, namely the preparation and presentation of questionnaires; analysis of responses to questionnaires and verification of the information provided; calculations of estimated subsidies or dumping margins; preparation of preliminary results; preparation of Federal Register notices explaining those preliminary results; receipt and analysis of formal submissions of comments on the preliminary results; preparation and publication of final results; and support of the Department of Justice in any subsequent court challenges to those final results. The workload of this program is constantly expanding because antidumping and countervailing orders are usually in effect for several years.

Both initial investigations and annual reviews require ITA to obtain and verify detailed subsidy, cost of production and/or price information. This entails considerable foreign travel for on-site verification.

The Office of Agreements Compliance (OAC) monitors and enforces bilateral steel trade arrangements with foreign governments. These include the two steel arrangements negotiated in 1982 with the European Communities as well as sixteen additional arrangements already signed under the steel program announced by the President in September 1984. This office will also administer agreements currently under negotiation or any that may be negotiated in the future under the President's program. Additional arrangements are being negotiated which will further implement, the President's program. These arrangements are undertaken for five years.

In October, 1982, the U.S. Government and the European Community (EC) concluded a steel trade Agreement covering most basic steel products. That Arrangement requires the Department to monitor total import levels, monitor diversion among product lines, prevent illegal transshipments through third countries and prevent transactions involving fraudulent evasion of Arrangement restrictions. In January 1985, the Untied States entered into an additional Arrangement with the EC which will include identical monitoring provisions for pipe and tube. In the Fall of 1985, the U.S.-EC arrangement on certain steel products was renegotiated and extended into 1989 in conformity with the President's Steel Program. In October 1984, the United States Trade Representative began a series of negotiations with certain countries which supply steel to the United States. By January 15, 1986, sixteen countries had signed agreements to restrict shipments of steel to the United States. Each of those agreements will require the same level of intense scrutiny given EC shipments to ensure the integrity of the programs.

Each importation of a licensed steel product is monitored and analyzed using several documents: a Special Steel Summary Invoice (SSSI), an official export certificate, specific data collected for the Census Bureau by U.S. Customs, and other documents submitted by importers. All other steel import transactions are monitored and analyzed using SSSI and entry-specific Census data. Effective enforcement of the arrangements also requires the Department to monitor imports from non-arrangement countries to prevent transshipment.

OAC processes invoices and data obtained from Customs and Census for every steel entry. In the first year of the EC Arrangement, over 35,000 export certificates were processed by Agreements Compliance. That number will increase to about 40,000 in 1986 with the addition of a substantial number of products requiring licensing by the E.C. Administration of arrangements with non-EC countries will involve a further tripling in the amount of export certificates processed.

Arrangements signed to date require quarterly formal consultations as well as ad hoc consultations under anti-shift provisions or "any other matter arising out of the operation of the arrangement." All arrangements also provide that the U.S. may authorize the issue of additional licenses in cases where it determines that a product is in short supply in the United States. Notice of each request for a short supply review is published in the Federal Register in order to give interested parties an opportunity to comment.

The organization that serves as the principle advisory unit for all active investigations and annual reviews to assure that AD/CVD cases are handled and decided uniformly, expeditiously and consistently with requirements of U.S. Government law, overall trade policies, and the international obligations of the United States is the Office of Policy. This is accomplished through a review of current cases for policy consistency; provision of guidance on policy issues which affect the application of AD/CVD statutes; development of policy guidance based on current interpretations of AD/CVD laws and regulations; identification of new or important policy issues and possible solutions permitting resolution of such issues within statutory time limits; preparation of briefing papers, testimony and speeches for the Secretary, Under Secretary for International Trade, and other Commerce officials; participation in bilateral and multilateral meetings and commissions; liaison with other areas in Commerce and other U.S. Government agencies which have an interest in the administration of the AD/CVD statutes; participation with the Office of the U.S. Trade Representative in negotiations regarding the possible suspension of AD/CVD investigations; and economic analysis of the trade effects of AD/CVD cases and certain trade monitoring activities.

Through its ADP section, the Office of Policy also provides support for the three operational offices, verifies machine readable data submitted by respondents, and creates programs to calculate dumping margins and subsidies; provides ADP and Information Technology support for all other assigned units.

Summary of Workload and Performance Data

	Category Mandated/Primary	1985 Actual	1986 Estimate	1987 Estimate
No. of AD/CVD Petitions Processed/Initiated......	Mandated	144/33	150	150
No. of Antidumping Investigations Initiated......	Mandated	88	89	89
No. of Countervailing Duty Invest. Initiated.....	Mandated	45	61	61
No. of AD Orders Issued..........................	Mandated	5	59	59
No. of CVD Orders Issued.........................	Mandated	15	41	41
No. of Suspension Agreements Negotiated..........	Mandated	3	7	7
No. of Potential Petitioners Counselled..........	Primary	35	75	75
No. of Official Hearings for AD/CVD Invest.	Mandated	135	135	135
No. of AD/CVD Orders Litigated...................	Mandated	71	80	80
No. of Administrative Case Records for Litigation..................................	Primary	30	80	89
No. of Administrative Protective Orders..........	Mandated	324	773	775
No. of Freedom of Information Requests Researched.................................	Mandated	28	30	34

	Category Mandated/Primary	1985 Actual	1986 Estimate	1987 Estimate
% of AD Cases Requiring Specialized Accounting Expertise	Primary	50	50	50
% of CVD Cases Requiring Specialized Accounting Expertise	Primary	28	23	23
% of AD/CVD Cases Completed Within the Statutory Time Limits	Mandated	100	100	100
% of AD/CVD New Cases Processed by ADP-Transaction/Case Ratio	Primary	80	85	87
% of AD/CVD Annual Review Cases Processed by ADP.	Primary	50	70	75
No of Current Annual Reviews of AD/CVD Orders Completed	Mandated	220	250	200
No. of Suspension Agreements Monitored	Mandated	24	30	32
No. of AD Orders Under Review	Mandated	107	125	143
No. of CVD Orders Under Review	Mandated	64	74	84
No. of AD Suspension Agreements Monitored	Mandated	3	3	3
No. of CVD Suspension Agreements Monitored	Mandated	21	27	29
No. of Official Hearings for AD/CVD Annual Reviews	Mandated	20	25	40
No. of SSSI's Reviewed	Primary	125,000	115,000	115,000
No. of EC Certificates Reviewed Under Steel Arrangement	Mandated	42,000	48,000	48,000
No. of Export Certificates Reviewed Under Non-EC Arrangements	Mandated	85,000	190,000	195,000
No. of Responses to Congressional and Controlled Correspondence	Primary	875	1,000	1,000
No. of Secretarial Briefing Papers Developed	Primary	340	375	400
No. of Secretarial Briefing Books Developed	Primary	72	90	96
No. of Fed. Reg. Notices on Short Supply Requests & Decisions	Primary	65	90	120
No. of Mandatory International Consultation Conferences	Mandated	54	72	72
No. of Domestic Formal Consultation Conferences	Primary	18	18	24

Special Import Programs--Included in this function are the Foreign Trade Zones and Statutory Import Programs.

Foreign Trade Zones Program: This program is administered by the Foreign Trade Zones (FTZ) Staff, which serves as the operational arm of the FTZ Board, an interagency body chaired by the Secretary of Commerce. The Board was established to license (grants of authority) and regulate Trade Zones (Customs Free Zones), under the FTZ Act of 1934 (19 USC 81) and the Board's regulations (15 CFR 400). Zones are sponsored by public or public type corporations, with some operated by private corporations under agreement with licensees. The Act's public utility requirement calls for reasonable and non-discriminatory rates. Annual reports to the Congress are required from the Board.

The number of zones has been increasing at an annual rate of 15-20 percent, and as of the end of FY 1985, there were zone projects in 118 ports of entry areas. A number of these projects involved subzones, which increased significantly to 85. Half are at auto assembly plants. The volume of goods entering zones surpassed $14 billion in 1985 with about 80 percent used in manufacturing operations. The Board is required to review manufacturing in zones and subzones to determine if it is in the public interest. Zone benefits are important to many firms involved in international trade in helping them to compete in the world market. States and local communities use zones as an element of their economic development efforts. During 1983-84, due to the tremendous increase in zones, The General Accounting Office and the International Trade Commission reviewed the program for the House Ways and Means Committee. Their findings (GAO/GGD-84-52, 3-2-84; USITC 1496, Feb. 1984), as well as a proposed revision of the Board's regulations necessitate the adoption of a systematic monitoring and enforcement program, and increased analysis of the net economic effect of manufacturing in zones and subzones.

Summary of Workload and Performance Data

	Category Mandated/Primary	1985 Actual	1986 Estimate	1987 Estimate
Applications processed:				
New foreign-trade zones	Mandated	20	20	20
New FTZ subzones	Mandated	27	35	45
Reorganizations	Mandated	15	45	55
Monitoring and Enforcement of Zones	Mandeted	---	---	75
Clearances for manufacturing	Mandated	60	75	90
Controlled Correspondence	Primary	470	550	600
Zone Tariff Schedule Filings	Mandated	55	60	70
Rule Making & Interpretation	Mandated	450	480	500
Hearings and conferences	Primary	55	70	80
Special reviews & investigations	Mandated	13	25	35
Meetings and speeches on zone projects	Primary	110	120	130
Annual reports from zones processed	Mandated	78	85	100

Statutory Import Programs: This program is responsible for administering certain laws pertaining to imports which include the Insular Watch Assembly Program authorized by P.L. 89-805 and P.L. 97-446; the Educational Scientific and Cultural Materials Importation Act (Florence Agreement), authorized by P.L. 89-651; and the Foreign Excess Property program, authorized by P.L. 81-152.

The Insular Watch Assembly Program allocates the duty-exemption for watches and watch movements imported into the United States from the Virgin Islands, Guam, and American Samoa and issues the special production incentive certificates authorized by P.L. 97-446; the Florence Agreement Program determines whether scientific instruments imported into the United States by non-profit institutions qualify for duty-free entry; and the Foreign Excess Property program determines whether surplus government property disposed abroad will relieve a domestic shortage or otherwise benefit the domestic economy and can therefore be imported into the United States.

Summary of Workload and Performance Data

	Category Mandated/Primary	1985 Actual	1986 Estimate	1987 Estimate
No. of Florence Agreement applications processed.	Mandated	300	300	300
No. of Watch Duty-Exemption Allocations made and certificates issued	Mandated	14	16	16
No. of Foreign Excess Property applications processed	Mandated	200	200	200

Increases for 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Export Administration	277 (292)	$20,849	290 (305)	$23,064	+13 (+13)	+$2,215

An increase of 13 positions is requested to enable ITA to meet new or expanded statutory requirements resulting from the passage of the Export Administration Amendments Act of 1985 (EAAA) and its signing into law on July 12, 1985. All increase requests are tied to specific sections of the Act. In addition, funding is requested to reimburse other Federal agencies who will provide technical assistance and analyses of new or emerging technologies and their strategic significance.

Commodity Classifications

An increase of 3 positions is requested to meet the requirements of Section 10(1)(2) of the EAAA which requires that we decrease the processing time of commodity classifications to 10 days. It now takes approximately 270 days to process a commodity classification. Prior to the EAAA, there was no time limit. EA cannot meet this time frame without additional resources. Currently, EA receives approximately 2,000 commodity classifications a year. With the elimination of licensing requirements for Administrative Exceptions Note (AEN) commodities to COCOM countries, and the classification confusion likely to follow, this number is expected to rise 20% on a continuing basis after an initial bulge of about 40% in FY 1986, bringing the total number of received commodity classification requests a year to 2,400.

Exporters have been using the license application process to obtain a quicker answer on their commodity classification questions. These classifications related license applications account for about one-half of all applications currently returned without action (RWA'd). It is expected that if we can meet the ten day processing time and provide prompt service on commodity classifications, exporters will not submit applications to receive commodity classifications (a common practice), but instead will use the commodity classification service. With approximately 16,000 cases RWA'd a year, one-half or 8,000 additional commodity classifications can be anticipated, bringing the total expected commodity classifications received to 10,400. It is estimated that on average an engineer can complete 7 commodity classifications a day. (7 commodity classifications/day x 5 days/week x 50 workweeks/year = 1,750 commodity classifications per engineer per year; 10,400 commodity classifications per year/1,750 = 5.94 engineer years.) EA received 2 positions in 1985 for this activity and savings through automation anticipated in 1986 will reduce the need for 1 additional position. This leaves a balance of 3 additional positions required to meet the new requirements of the EAAA in this area.

These classifications play a vital role in the initial control of commodities and cannot be treated lightly. Should the exporter receive a G-DEST classification (the authorization to ship to almost any destination in the world without prior approval from EA in the form of a validated license) in error, serious national security damage may occur. With an increase of 3 positions for this area, EA will be able to complete most of the incoming commodity classifications in a time frame consistent with that required by the EAAA. EA will attempt to divert resources from its base in order to address the remaining commodity classifications.

Licensing

An increase of 3 positions is requested to perform the new EAAA mandated licensing tasks.

Under the EAAA, the processing time of COCOM member country cases will be reduced to 15 days, placing a completely new requirement on the organization not so much in terms of processing the licenses faster, but rather handling the liaison work with Customs, performing the notification to the exporter of the license number as soon as the application is received, timely enforcement screening of applications, and consulting with industry inherent in a situation where the absence of a timely notification serves as positive notification, i.e. permission to export. (There is a universe of approximately 2,000 cases for COCOM countries that will not lend themselves to an Export Control Automated Support System (ECASS) type processing due to their excessively complex nature. Even with the start up and full operation of ECASS some of these additional resources will be needed to continue to review these cases.) Due to the decontrol of AENs to COCOM members, and the corresponding reduction in license applications by 15,000 (plus an 8,000 reduction in license applications due to increased use of the commodity classification service and a further 1,000 reduction in license applications due to increased use of the bulk license system for a total reduction in license applications received of 24,000), Export Administration expects a savings of 2 positions in the licensing area (there are currently 11 licensing officers working on 120,000 free world licenses reviewing approximately 11,000 licenses a piece per year (44 license applications per licensing officer per day). These 2 positions will be diverted to perform the new requirements for COCOM country license applications.

In order to meet the above requirements an increase of 3 positions is required to establish a COCOM-member country desk that will include a staff of 5 positions. The staff will address the new notification and coordination activities and include the following: 1 supervisory Export Administration Specialist who will oversee the operation and provide guidance to the export community on these cases, 2 Export Administration licensing officers, 1 Export Administration Specialist to assist exporters in processing license applications and to provide a liaison with Customs and the Office of Export Enforcement to ensure timely processing of pre-license checks and prompt exit from the country for legitimate exports, and 1 processing clerk.

Foreign Availability

An increase of 3 positions is requested to meet the requirements of Sections 6 (f) (2) (e) and 6 (j) (4) of the Export Administration Act. New requirements for foreign availability assessments will be imposed under the 1985 Amendments to this Act for a new class of controls (foreign policy) that were not anticipated previously.

Foreign Availability assessments on commodities and technologies under foreign policy controls encompass a much larger universe of commodities and technologies for which an allegation of foreign availability can be sustained that those under national security controls. In this area, the staff has to begin assessing the availability of petroleum extraction and shipping equipment as part of its new foreign policy control workload. There are several other major new workloads imposed by the EAAA. Status reports as well as semi-annual reports must be sent to Congress on the progress of foreign availability assessments and our ability to meet deadlines for processing of the assessments. To accomplish this work timely, a large quantity of both unclassified and classified information must be screened and analyzed. For example, four people are currently reviewing 975 pieces of classified information a week on a part-time basis, accounting for only 67% of the information received. Another large and unexpected workload requires that much of the staff review newly proposed Defense Department controls that are still classified at this time. The foreign availability assessments are, and have been, used in the U.S. Government's preparations for the COCOM List Review as well as in deliberations by all involved U.S. agencies to impose unilateral national security or foreign policy controls in accordance with the requirements of the EAAA. Without additional staff, we will not be able to fully meet these new EAAA requirements and simultaneously complete the projected 32 assessments as forecasted for FY 87.

Foreign Policy

An increase of 4 positions is required to meet the requirements of Sections 5 (k), 6 (b) and 14 (e).

Section 5 (k) requires that efforts be undertaken to achieve in non-COCOM countries the same treatment regarding exports as is practiced by COCOM countries. EA will assist the State Department in these negotiations. Currently EA is able to devote less than one position to these negotiations. Two negotiations will be completed in FY 1985. Our goal is to complete 20 more such negotiations with both COCOM and non-COCOM countries by the end of FY 1987, with continuing follow-up negotiations as the COCOM list is revised annually.

Section 6 (b) adds new criteria which must be developed and presented in a report to Congress before new foreign policy controls may be imposed. EA must show that the proposed controls are likely to achieve the intended foreign policy purpose, the effect on the export performance of the U.S., and that the U.S. has the ability to enforce the controls, etc. In addition, Section 14 (e) requires inclusion in the annual report of the extent of economic injury to U.S industry and the extent of job displacement caused by controls to controlled countries. A full analysis of the consequences of the export of turnkey plants and manufacturing facilities is also required. EA has not had to perform such in depth analysis in the past. This increase for the foreign policy area is essential to EA's ability to conduct and meet the analytical responsibilities as assigned by the EAAA and complete 20 negotiations and 17 economic studies.

Technical Resource Capability

An increase of $1 million is requested to fund the use of technical expertise resident within the Federal government. Agencies such as the National Bureau of Standards or the Department of Energy's National Laboratories will be reimbursed for technical support necessary to facilitate the development of U.S. proposals at COCOM and to assist with precedent setting export control decisions in connection with specific licenses. EA cannot economically retain in-house technical expertise across the breadth of the over 200 control entries and the emerging technologies. NBS or other agencies have resident expertise in many of the commodity areas for which we require support.

In order to provide the in-depth technical expertise needed for Commerce to fulfill its export control agenda, NBS will designate individuals to attend meetings of the Commerce Technical Advisory Committees (TACs), the Defense Technical Working Groups, and the State Department Technical Task Groups. On occasion, a technical expert may be requested to attend Working Group I meetings of the State Department Economic Defense Advisory Committee, and to support the U.S. negotiating team at COCOM. Individual meetings will normally be preceded by two days of preparation, and followed by a day to write a summary of the main points of discussion. The TAC's will normally meet quarterly for two days. The TACs for which support is desired, subject to the availability of acceptable NBS experts, are (a) Computer Systems, (b) Computer Peripherals, (c) Automated Manufacturing, (d) Biotechnology, (e) Electronic Instrumentation, (f) Semiconductors and Semiconductor Manufacturing, (g) Telecommunications and (h) Transportation.

Subject to an agreed statement of work and availability of experts, individual tasks will result from discussions within the TAC/TWG/TTGS, from unique or precedent setting cases within EA of the Commerce Operating Committee, and from activities in connection with the List Review. In addition, individual tasks will support annual refinement of the Militarily Critical Technologies List and its implementation, or other studies directed by the Director of the Office of Technology and Policy (OTPA) of Export Administration or by the Assistant Secretary for Trade Administration.

A number of such technical support studies have been identified as potential candidates for NBS support. EA has established a Biotechnology (including bioelectronics/biochips) TAC but lacks in-house expertise in this area. A survey is needed to identify the parameter, state-of-the-art, and probable dates by which biotechnology controls might be mandated. EA has noted that the currently used measure of computer capability (called processing data rate or PDR) yields unrealistic results when applied to some situations. Alternate performance parameters need to be defined. Controls have been established on certain computer processes, such a signal processing and image analysis. Better, more specific definitions need to be developed which do not inadvertently embargo low level, non-sensitive technology. A similar effort needs to be done for array transform processors. A definition needs to be developed of just what constitutes a supercomputer, and what alternative technical approaches might negate straight-forward PDR-based control levels. Several control proposals have been made regarding materials (polymeric substances, advanced ceramics, and specialty metals) but which EA cannot evaluate because we lack in-house expertise.

The position and object class detail for this increase follows:

Title	Grade	Number of Positions	Annual Salary
Industrial Engineer	GS-14	1	$47,392
Policy Analyst	GS-14	1	47,392
General Engineer	GS-14	1	47,392
General Engineer	GS-13	1	38,852
Export Administration Specialist	GS-13	2	77,704
Licensing Officer/Engineer	GS-13	2	75,198
Policy Analyst	GS-13	2	75,198
Regulatory Compliance Officer	GS-12	1	32,673
Export Administration Specialist	GS-12	1	31,619
Clerk Typist	GS-4	1	12,862
Total salaries		13	486,282
Other personnel compensation			35,000
Total compensation			521,282
Personnel benefits			57,718
Travel and transportation			28,000
Standard Level User Charges (SLUC)			39,000
Communications, utilitier and rents			16,000
Printing and reproduction			3,000
Other services			1,517,000
Supplies and materials			7,000
Equipment			26,000
Total requirements			$2,215,000

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Import administration..	220 (217)	$13,691	275 (258)	$16,065	+55 (+41)	+$2,374

This increase is comprised of three components including: 27 positions (20 FTE) and $1,254,000 for the Office of Investigations; 12 positions and $568,000 for the Office of Compliance; 16 positions and $552,000 for the Office of Agreements Compliance.

This increase is requested to enable Import Administration to deal with the growing complexity of AD/CVD petitions (including the many complex issues that must be dealt with in their initial investigation) and to meet the statutory obligation for conducting administrative reviews and participating in and assisting with suspension agreement discussions. In addition, it will provide the necessary resources to implement the numerous voluntary restraint agreements with countries supplying steel to the United States and fund legal support vital to Import Administration's ability to carry out its statutory mandates.

Import Administration's principal responsibility is to enforce the most significant unfair trade laws -- the Antidumping (AD) and Countervailing Duty (CVD) laws. In 1980, when the function was transferred to Commerce from Customs, Import Administration was allotted 207 positions. Prior to 1980, an average of 40-50, relatively simple, AD/CVD petitions were filed each year. In 1980, when the number of petitions dropped to 18, Import Administration's staff was significantly reduced. Since that time, not only have the number of petitions being filed increased but they have become increasingly more complex with an insufficient number of positions to handled the workload. In 1984, 122 cases were initiated, many of which were complex (e.g., alleged subsidies in non-market economies, government equity purchases in poorly performing companies, and allegations of sales at prices below the cost of production). While our economy remains strong, the AD/CVD caseload continues to increase because of the trade deficit's impact on certain parts of the economy. In 1985 144 cases were initiated, which included a wide range of complex issues (e.g., government equity purchases in poorly performing companies, allegations of sales at prices below the cost of production and constructed value, countervailing duty cases involving thousands of respondents and requiring a sampling technique, and extremely large cases involving hundreds of millions of dollars of trade and numerous transactions). In 1986, it is estimated that 150 such cases will be initiated. The increasing number of cases equates to a 24% increase over FY 1984, and a substantial increase over FY 1983. An increased caseload hinders our ability to meet significant responsibilities, such as identification of suitable surrogates in non-market economy cases, legislative initiatives, intra- and interagency coordination, and assurance that the U.S. acts in accord with its international obligations.

There has also been an increase in the number of AD/CVD orders and suspension agreements in effect; an increase of approximately 125 in 1982 to an estimated 200 currently. Each of these require an "annual review," i.e., an investigation to determine the precise amount of AD or CVD duties owed for the year in question.

As a result of the President's September 1984 decision (a result of the U.S. Steel Industry's Section 201 Complaint) to negotiate steel agreements the United States Trade Representative began a series of negotiations with certain countries which supply steel to the United States. Sixteen countries have signed agreements to restrict shipments of steel to the United States. Each of these agreements will require the same level of intense scrutiny given EC shipments to ensure the integrity of the programs.

Office of Investigations: An increase of 27 positions is requested to enable this program to fullfil its investigative responsibilities under the AD/CVD law. Specifically, this increase addresses the following: (1) an increase of approximately 300 percent in the number of cases inititated over the pre-1980 level; (2) an ever increasing number of cases involving complicated issues which must be decided on within very strict statutory deadlines (for example, determination of upstream subsidies, creditworthiness and "equity-worthiness" of government-owned companies, market value of stock not traded on a market, weighted cost of capital of each company of concerned, value to the seller of buyer export credits, and in the AD cases allegations of sales at less than the cost of producing home market products that are frequently filed late in the investigation period with little time remaining); (3) inadequate resources that impact on Import Administration's ability to adequately perform investigations; and (4) a need to up-grade our in-house accounting/financial capability in order to deal with a growing number of cases involving complex accounting/financial issues.

without the requested increase inadequate resources will continue to have an adverse impact on this programs ability to conduct investigations. The following are some of the shortfalls that have resulted: (1) unmanageable, analyst/investigation and analyst/respondent ratios of 1:4.7 and 1:16.4 which make it impossible to conduct adequate investigations and verifications (Staff frequently has to rely on unsupportable information when making decisions due to our inability to prove that responses were false or inaccurate. Customs is stepping up its efforts against fraudulent steel importing practices while Import Administration is severely hampered in its efforts to uncover fraudulent practices in its AD/CVD investigation); (2) resorting to sampling techniques in analyzing sales (AD) and subsidies (CVD) (domestic petitioners vigorously protest these procedures); (3) failure to conduct a sufficient number of verifications (the staff may have to resort to a sampling of companies for verification. Domestic petitioners strongly favor an increase in the number of verifications, to assure the accuracy of foreign respondent's submissions.); (4) criticism from the business and legal community for lack of consistency on procedural and methodological applications; (5) official corrections that have been made following a rushed decision-making process; (6) detailing analysts from other areas of Import Administration in order to meet strict statutory deadlines which exacerbates the annual review problem and implementation of numerous steel arranagements; (7) constant stress on analysts who handle too many cases (can only lead to vital analytical mistakes if the under-staffing situation is not alleviated); (8) insufficient time available to train new analysts or keep experienced analysts abreast of recent developments; (9) inability to give timely petitioner assistance, and assistance to small businesses; (10) inability to properly prepare for litigation; (11) large expenditures for overtime; (12) the inability of analysts to take their annual leave.

Cases involving complex accounting/financial issues have increased and continue to expand. Currently, a major portion of this workload is handled through a contract with a major accounting firm. Due to the workload and complexity of accounting issues the use of a contractor has become increasingly expensive. In order to deal with this situation and off-set the increasing costs of a contract we are proposing to up-grade our in-house accounting/financial expertise by hiring five additional accoutants. This increase in staff will enable the program to deal with most of the accounting/financial issues, thereby relying only on a outside accounting firm for new and unique applications of international accounting/financial expertise. In order to meet the workload our accounting staff will be continually trained. They will be able to participate in continuous discussions with petitioners and respondents, possess a through knowledge of the Act and Import Administration's policies, be able to provide a more rapid turn-around on accounting problems/issues and provide valuable advice to other Import Administration areas.

The above problems cannot be resolved without an increase in the level of staff. Such an increase is essential if we are to bring the level of staff in line with the investigative workload and up-grading our in-house accounting expertise to a level where we can reduce our need for an expensive outside accounting firm.

Office of Compliance: An increase of 12 positions is needed to fulfill this program's statutory responsibility for conducting administrative reviews and participating in and assisting in suspension agreement discussions.

Once an investigation has been completed and an AD/CVD order is issued or a suspension agreement is accepted, the monitoring and requested administrative review of the order or agreement becomes the responsibility of this program area. The Act requires that requests for reviews of all outstanding antidumping and countervailing duty orders be conducted in order to adjust the dumping and countervailing duty margins, they must inform the Customs Service of the amounts of antidumping and countervailing duties to assess, and to inform Customs of the cash deposit of estimated antidumping and countervailing duties to be collected on future imports. Similar activities are required for suspension agreements, except for the assessment and deposit steps. The review process involves essentially the same tasks as those described for the investigation program, namely: (1) preparation and presentation of questionnaires; (2) analysis of responses to questionnaires and verification of the information provided; (3) calculation of subsidies or dumping margins; (4) preparation of preliminary results; (5) preparation of Federal Register notices explaining those preliminary results; (6) receipt and analysis of formal submissions of comments on the preliminary results; (7) holding hearings; (8) preparation and publication of final results; and (9) support of the Department of Justice in any subsequent court challenges to those final results.

The workload of this program is constantly expanding because AD/CVD orders are generally in effect for several years. The number of AD/CVD orders has increased from approximately 125 in 1982 to 171 as of FY 1985. We project that the number of orders and suspension agreements will increase to 229 in 1986 and 259 in 1987, with a proportional increase each year thereafter. Only 25 percent of the annual reviews are being verified at foreign sites. Both initial investigations and annual reviews require obtaining and verifying detailed subsidy, cost of production and/or price information. Congressional interest indicates a positive inclination to verify as many reviews as possible. This will cause a substantial increase in the level of travel funds required to conduct on-site verifications.

Office of Agreements Compliance: An increase of 16 positions is requested to enable this program to effectively monitor and enforce the bilateral steel trade arrangements with foreign governments.

This increase is a direct result of the President's decision to negotiate agreements with certain countries which supply steel to the United States, which were similar to the U.S.-European Economic Community Agreement currently being monitored and enforced. Since April 30, 1985, sixteen countries have signed agreements to restrict shipments of steel to the United States. Each of these agreements will require the same level of intense scrutiny given EC shipments to ensure the integrity of the programs. These new steel arrangements have had a significant impact on the workload of this office; an overall increase of approximatly 200 percent. Each importation of a licensed steel product is monitored and analyzed using several documents including: (1) a Special Steel Summary Invoice (SSSI): (2) an official export certificate; (3) specific data collected for the Census Bureau by U.S. Customs; and (4) other documents submitted by importers. All other steel import transactions are monitored and analyzed using SSSI and entry-specific Census data. Effective enforcement of the arrangements also requires the Department to monitor imports from non-arrangement countries to prevent transshipment.

This program is required to process invoices and data obtained from Customs and Census for every steel entry. In the first year of the EC Arrangement, over 35,000 export certificates were processed. With the addition of pipe and tube to the list of EC products requiring licensing this number will increase to about 48,000 export certificates in 1986 with the addition of a substantal number of products requiring licensing by the EC. Administration of arrangements with non-EC countries will involve a further tripling in the amount of export certificates processed. Arrangements signed to date require quarterly formal consultations as well as ad hoc consultations under anti-shift provisions or "any other matter arising out of the operation of the arrangement." All arrangements also provide that the U.S. may authorize the issue of additional licenses in cases where it determines that a product is in short supply in the United States. Notice of each request for a short supply review is published in the Federal Register in order to give interested parties an opportunity to comment.

Aside from the current workload in this office the potential number of agreements that are underway will place an even heavier burden on the existing staff. Without additional positions these agreements can not be properly implemented or monitored effectively.

The positions and object class detail for this increase follows:

Title	Grade	Number of Positons	Annual Salary
Supervisory Import Compliance Specialist.....	GM-13	3	$116,556
Accountant..................................	GS-12	3	98,019
Accountant..................................	GS-11	2	52,762
Import Compliance Specialist................	GS-11	20	527,620
Import Compliance Specialist................	GS-9	15	327,060
Import Compliance Specialist................	GS-7	8	142,592
Secretary...................................	GS-5	1	14,390
Clerk-Typist................................	GS-4	3	38,586
Total Salaries..............................		55	1,317,585
Less Lapse (25%)............................		-14	-329,396
Total compensation..........................		41	988,189

Title	Annual Salary
Personnel benefits	123,811
Travel and transportation of persons	365,000
Transportation of things	2,000
Standard Level User Charges (SLUC)	166,000
Communications, utilities and rents	55,000
Printing and reproduction	60,000
Other services	554,000
Supplies and materials	28,000
Equipment	32,000
Total	$2,374,000

Activity: International trade
Subactivity: U.S. and Foreign Commercial Service

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Field operations management........	81 (92)	$8,723 (8,124)	78 (78)	$8,532 (8,570)	78 (78)	$8,650	78 (78)	$8,650	--- (---)	---
Export promotion services.........	124 (106)	15,081 (14,930)	123 (123)	14,250 (14,300)	123 (123)	13,555	111 (111)	12,184	-12 (-12)	-$1,371
Domestic operations...............	394 (391)	19,127 (19,531)	389 (394)	18,704 (18,895)	389 (394)	19,241	389 (394)	19,118	--- (---)	-123
Foreign operations................	706 (699)	33,869 (36,454)	706 (706)	34,981 (34,981)	706 (706)	36,385	706 (706)	35,994	--- (---)	-391
Total requirements................	1,305 (1,288)	76,800 (79,039)	1,296 (1,301)	76,467 (76,746)	1,296 (1,301)	77,831	1,284 (1,289)	75,946	-12 (-12)	-1,885

Goals and Objectives

Goal: To promote the growth of U.S. exports through the development and delivery of services to the business community both in the United States and overseas.

Objectives: To increase the number of new-to-export firms making a successful commitment to exporting; increase the number of old-to-market firms successfully following up on their original market penetration with continued promotion activities; provide small and medium-sized businesses capable of exporting with the commercial information and counseling necessary to develop their export marketing programs; encourage and sponsor additional involvement by the private sector and the states in export promotion efforts; and assist companies in taking advantage of business opportunities created by the Caribbean Basin Initiative.

Base Program

To meet its goals, the U.S. and Foreign Commercial Service (US&FCS) develops a flow of pertinent commercial information and conducts direct business counseling for the U.S. business community. The US&FCS develops and delivers to the private sector a wide variety of ITA programs, and helps ensure that these programs meet the need of end users and achieve the ultimate aim of increased U.S. exports. The US&FCS is building closer relationships with American Chambers of Commerce domestically and overseas, as well as with state and local government organizations involved in export promotion.

Field operations management--US&FCS headquarters staff plans and coordinates the utilization of resources to effectively achieve commercial policy and program objectives, and supports its domestic and overseas staff in areas such as training, career development, financial management, and liaison with ITA program elements.

Field operations management is especially active in building a highly motivated, well-trained corps of commercially-oriented career officers for the Office of Foreign Operations (OFO). These officers are selected as a result of a rigorous assessment process. Candidates are tested for their government, business, intercultural, and intellectual skills. In addition to the career service, the OFO makes a number of "reserve appointments" which permit short-term assignments for senior executives from both the private and public sectors.

Field operations management is encouraging greater private sector participation in export promotion through (1) helping to develop cost recovery programs which more closely reflect the market value of US&FCS services and which will increase the possibility of the private sector assuming the task of providing a number of these services--(These include reimbursement for government speakers, increasing export seminar fees, increasing the participation of individuals from the private sector in government seminars, charging for a number of services delivered by the US&FCS, and offering packaged information programs on a cost recovery basis.); (2) implementing a promotion program for Export Trading Companies to encourage more private sector export marketing assistance; (3) making wider use of private sector volunteers through expansion of domestic District Export Councils and other Office of Domestic Operations (ODO) associate offices, and (4) continuing a market outreach program using business trade associations, and State trade development organizations to increase the understanding and use of the information and services provided by US&FCS. The US&FCS is attempting to supplement its professional resources with a corps of volunteers who are retired international business executives.

These efforts are designed to demonstrate that Federal programs can rely on multipliers (i.e. state and local governments, trade associations, world trade clubs, banks, and chambers of commerce) to increase private support for export promotion, and that export promotion is clearly a Government/business partnership.

The US&FCS also has responsibility for managing the Caribbean Basin Business Information Center (CBIC), and coordinating Commerce Department activities in support of the Caribbean Basin Initiative. This includes chairmanship of the Caribbean Basin Task Force/Subcommittee on Operations, an interagency group which meets periodically at both staff and principal levels to ensure successful implementation of the Initiative. CBIC's principal efforts to promote increased trade and investment under the CBI are focused on organizing a CBI support network for business, with US&FCS domestic and foreign offices serving as the core, and involving state and local government and several hundred private sector multiplier groups both in the U.S. and the Caribbean Basin. The CBIC operates as a central information clearing house and conducts a business outreach and counseling program consisting of seminars, workshops, publications, business development missions, trade shows, and an "Active Match" program to bring together U.S. and Caribbean Basin firms with complementary interests.

Export Promotion Services--Export promotion services (EPS) develops and markets products and services to help U.S. firms, (particularly small and medium-sized companies), promote the sale of their goods and services overseas and fulfills the requirement of the Secretary of Commerce to publish notice of Federal procurements through the Commerce Business Daily. It represents the consolidation, in 1984, of ITA's overseas trade promotion and information product services within the US&FCS. This consolidation: 1) encourages coordination of competing policy objectives such as revenue growth, privatization, and broader participation by new-to-export/new-to-market (NTE/NTM) firms in exporting; 2) ensures a clear line of authority and responsibility for the operation of trade events; and 3) forges a stronger link between information product development and distribution.

EPS plans and conducts overseas trade promotion activities in conjunction with its overseas (Regional) Export Development Offices which have supra-regional trade coordination responsibilities, US&FCS and Department of State posts, other USG agencies, and state/local export promotion entities. These activities include trade and seminar missions, State and Industry-Organized Government Approved (S/IOGA) missions, catalog and video catalog exhibitions, USG-sponsored exhibitions, and U.S. Pavilions at major international trade fairs.

In its trade promotion events, EPS focuses on export markets with high long-term export potential, particularly emerging markets in Third World nations. This emphasis ensures that U.S. firms are provided with a vehicle for establishing an early market presence in areas where private sector promotional assistance is limited.

EPS encourages private sector sponsorship of leading overseas and domestic trade shows through two activities: the Trade Fair Certification Program and Foreign Buyer Program. Certified trade show organizers agree to provide participants with a high level of support services such as overseas promotion, translation, exhibition design, business facilities and shipping and customs assistance. Shows are promoted through the network of US&FCS and State Department posts overseas, and US&FCS district offices throughout the United States. In addition to granting Certification, EPS directly assists and counsels organizers on their marketing efforts and, at the discretion of the organizer, coordinates arrangements for special promotion services on a cost recovery basis.

During FY 1986, EPS reinstituted an improved Foreign Buyer Program specifically designed to support private sector trade promotion efforts. US&FCS-organized Foreign Buyer visits to major U.S. trade shows provide expanded opportunities for NTE/NTM, small and medium-size firms in high export potential industries to meet with pre-qualified foreign buyers (i.e., visiting agents/distributors, original equipment manufacturers, licensees, etc.).

EPS also works closely with major multiplier organizations such as the National Governors' Association, National State Development Association, trade associations, financial institutions, and local chambers of commerce to develop innovative joint venture programs that promote greater utilization of trade promotion products and services. These efforts directly support and encourage a stronger, cooperative, Government/business trade promotion partnership.

EPS offers a variety of market research and statistical reports drawn from Census information and U.N. databases, overseas post and embassy reports, and contact information derived from post sources and surveys. This information is packaged in a wide variety of user-oriented printed products which range from in-depth analytical packages with both industry and country orientation (Export Statistical Profiles, Annual Worldwide Industry Review, International Market Research) to special high-information content abbreviated studies that provide executives and marketing professionals special insight into fast-breaking trends and emerging opportunities (Export Overview, Country Market Survey, Export Highlights). The contracted research products are selected through a comprehensive process which combines economic indicators, overseas posts' recommendations, private sector inputs, trade show scheduling and policy-related export objectives to target the best areas for research.

The array of contact products offered by EPS includes the Export Contact/Trade List Service identifying foreign firms which can assist U.S. exporters to enter specific market(s); the Agent/Distributor Service (ADS) and World Trader Data Reports (WTDR) Service which offer U.S. firms reliable commercial information on foreign traders seeking overseas agents or distributors for their products; and the Trade Opportunities Program (TOP) which provides U.S. exporters with timely notification of foreign buyer/agent interest in purchasing or representing specific U.S. products and services through a computer-matched individualized TOP Notice Service and through a printed weekly "Bulletin".

EPS has applied automated information retrieval to improve the flexibility and selectivity of EPS product offerings, making them more useful to all exporters, but with special emphasis on the needs of the new-to-market and new-to-export client. Wherever possible, privatization and use of multipliers has also been used as a vehicle for broadening dissemination of export information. For example, TOP and contact list data tapes are now made available to private vendors, on a cost recovery basis, so that they, in turn, can promote and distribute information to their outlets. All of EPS products and services now achieve wider distribution through US&FCS district offices, state agencies, and other multiplier groups; through direct mail contact with specific industries and their trade associations; and through the industrial press.

EPS also builds foreign purchasers' awareness of U.S. products, and stimulates NTE/NTM firms to market their goods overseas through the Commercial News USA/New Product Information Service (CNUSA/NPIS) which publishes information on new U.S. products. US&FCS overseas posts' commercial newsletters reprint this information worldwide. More than 200,000 potential foreign buyers, agents and distributors receive this information. EPS also prepares awareness and other seminar kit materials for distribution directly to the business community through the US&FCS network.

Constantly striving to improving the quality and timeliness of trade promotion programs, EPS manages the office automation system for the US&FCS. This system supports the various US&FCS commercial information gathering, processing and dissemination functions. The system simplifies the preparation of information for distribution to private sector vendors and other multipliers and substantially improves the timeliness and quality of marketing services provided to domestic business and overseas clients.

Domestic operations--The domestic field has been in existence since 1912. Today, its successor organization is the primary vehicle for delivering the programs of the International Trade Administration to the U.S. business community. With 48 principal offices located in the major commercial/industrial centers in the U.S., the system constitutes the main outreach mechanism for the U.S. Government's national export expansion program. Its major focus is to provide international marketing assistance to prospective and active exporters, allowing them to develop and sustain a sales and marketing presence on a world-wide basis, which results in a positive impact on employment and profits.

Each district office is guided by an annual Work Plan, predicated upon national objectives and incorporating the major responsibilities of office employees. The Plan is the district office's collective response to the primary organizational objective which is to increase the number of small and medium sized firms engaged in exporting. The plan provides an analysis of the district office territory, relating country market and/or industry sector opportunities for exploitation by local industry. The local industry universe is refined to ensure export development programs and services are made available to all industry groups within the district office territory. It reflects special efforts to identify and actively assist firms which have competitive products and services and are capable and interested in supporting a sustained overseas marketing effort.

District office trade specialists act as counselors, within an Account Executive system, analyzing a firm's objectives and export potential. They evaluate country and product demand, explore financing options, both private and Government supported (EXIMBANK, SBA, OPIC, AID, etc.), explain documentation, shipping, sales and distribution techniques, as well as provide more generalized assistance and marketing information.

Trade Specialists utilize a wide variety of information and services drawn from both private and public sector sources to help firms enter new overseas markets and take advantage of specific foreign trade and investment opportunities. The ITA marketing programs are essential tools of this counseling activity.

Each office is linked, through a world-wide cable/telex network, with all U.S. commercial posts overseas. This direct linkage is the main avenue over which the primary commercial intelligence services provided by ITA are transmitted to the exporting community.

Trade Administration activity (which is among the areas of responsibility where district offices serve the exporting community) has grown dramatically in recent years. Counseling on export license requirements and documentation currently constitutes 20 percent of district office workload. The importance of this work is emphasized by the fact that most high technology companies, which constitute the bulk of high potential export firms, also have the greatest need for export licensing assistance.

District offices are also specifically responsible for the domestic portion of US&FCS events recruitment, including overseas commercial exhibitions and trade missions. Targeting and planning for this workload is coordinated with Trade Development and, in some cases, directly with Export Development Offices (EDO) overseas. Domestic offices also support the Trade Show Certification Program by, for example, facilitating foreign buyer contacts at selected domestic shows as well as promoting such shows.

Programs and efforts involving trade finance have grown rapidly as district offices encounter serious problems among client firms due to dollar re-evaluation and the debt situation in the LDC markets. The domestic offices, in cooperation with the EXIMBANK and the Foreign Credit Insurance Association (FCIA), market the export finance facilities of these agencies for the benefit of small and medium-sized firms. Trade specialists also seek to work with regional banks in an effort to upgrade their trade finance capabilities, especially in the uses of EXIMBANK and FCIA programs.

To complement individual counseling efforts, district office personnel conduct seminars, conferences and workshops. A myriad of topics are addressed, ranging from basic "How to Export" seminars and country-oriented conferences, to those which explore timely subjects such as the Foreign Sales Corporation Act and opportunities in Japan resulting from recent easing of the country's import requirements. In order to multiply the effects of their efforts, the district offices enlist the support of, and coordinate activities with, state and local governments, trade associations, world trade clubs, banks, and chambers of commerce. The organization of the 51 District Export Councils is an important element in the campaign to combine private and public sector assistance that is orchestrated by each of the district offices. Nearly 1,000 Associate Offices such as Chambers of Commerce provide counseling services under the guidance of local district offices. Recognition of successful exporters and service organizations providing export assistance is accomplished through the President's "E" Award Program.

District offices also maintain commercial libraries as reference sources for the U.S. business community. Additionally, they periodically publish newsletters which identify export opportunities, list upcoming activities and include articles of interest to active and prospective exporters.

Foreign operations--The overseas field was established in 1980 to carry out Department of Commerce programs abroad for the direct benefit of the U.S. business community. Today we have operations in 63 foreign countries at 125 diplomatic and consular posts, which account for more than 90 percent of U.S. exports.

The commercial offices overseas perform a number of activities which are directed at benefiting the trade position of the United States. Among these are: identifying trade opportunities for U.S. products; finding potential representatives or agents for U.S. firms interested in penetrating a specific market; providing business consultation to U.S. visitors at posts abroad, making the appropriate business appointments for them to see potential trading partners or host government officials (either to promote sales or to contest discriminatory business practices); reporting business opportunities which have resulted from the Multilateral Trade Negotiation (MTN) agreements; and assisting in the implementation of export control and other trade regulation activities.

Offices overseas use a wide variety of information and techniques available from the private and public sector in order to assist U.S. firms. Officers are responsible for reporting on major projects in their host countries in order to alert U.S. firms to these opportunities. Officers also support the programs of the OPIC, the EXIMBANK, the U.S. Trade Representative, the U.S. Travel and Tourism Administration, the Trade Development Program, National Oceanic and Atmospheric Administration/Fisheries, and other U.S. Government agencies engaged in conducting commercial relations with foreign countries. Officers are instructed to monitor MTN implementation by reporting on foreign government legislative and regulatory measures, procurement practices, and bidding and certifying procedures which may affect U.S. trade in the host country. They work to settle trade disputes, and provide analyses and reports on local industry and commodity developments which have a bearing on the U.S. competitive position in the host country as well as an assessment of other countries' capabilities with which the U.S. competes for markets. The offices overseas maintain commercial libraries as reference sources for information on U.S. suppliers of specific products and services. These are especially useful to foreign traders who seek sources of U.S. goods. Officers prepare World Trader Data Reports on foreign firms, upon request from a U.S. exporter, in order to provide background and financial information on the foreign firms with which an American company wishes to do business. Newsletters are published and disseminated to interested foreign traders. These commercial newsletters identify new U.S. products and sources of American-made products being introduced to the export market. Officers and staff also provide on-site support to specific export promotion programs of the Department of Commerce, specifically trade missions and trade fairs in which U.S. exporters participate. Market research is also undertaken abroad to determine the potential market for goods to be exhibited through specific trade promotion events.

A Post Commercial Action Plan (PCAP), which sets forth country marketing strategies detailing the specific mix of policy initiatives, trade promotion techniques and export development programs, is agreed to annually between ITA program managers and each overseas post. The PCAP thus establishes the post's work priorities. Once a post's PCAP is developed, ITA program managers review a post's performance in achieving the agreed-upon goals. PCAP's emphasize services rendered to back-stop the marketing objectives of the small and medium-sized members of the U.S. business community. Our efforts overseas are directed toward helping these small and often new-to-market firms find suitable representation abroad, providing market counseling, and initiating business and government contacts for these firms. For the experienced exporter, the post identifies and disseminates specific new trade opportunities developed in the field, supports their ongoing market objectives, and seeks their inclusion in a variety of post-initiated trade fairs, trade missions and catalog shows as a supplement to programs scheduled by Export Promotion Services in Washington. Our posts also work closely with American Chambers of Commerce and banking interests overseas, as well as with other agencies in the U.S. missions overseas (such as the U.S. Department of Agriculture) having an interest in export promotion.

A goal-oriented individual officer performance plan is tied to each PCAP. Each officer will have his/her achievement evaluated against the goals which are stated in specific and measurable terms. All ITA programs, which have had an input into the development of the country PCAP's, provide input into these evaluations.

Summary of Domestic and Overseas Workload and Performance Date

	1985 Actual	1986 Estimate	1987 Estimate
Firms exporting for the first time	728	750	740
Firms entering at least one new market	2,321	2,100	2,100
OTM firms assisted overseas through local post-initiated trade promotion events	3,446	3,300	2,800
Business counseling sessions, Domestic and Overseas	268,895	285,000	282,000
Counseling sessions with Associate Offices in the U.S.	3,370	3,370	3,335
Counseling sessions with state and local government agencies in the U.S	3,000	3,000	2,970
Conferences and seminars held in the U.S	3,536	3,500	3,465
People attending conferences and seminars	190,000	190,000	188,100
U.S.-organized trade events supported overseas	110	100	80
Government procurement conferences in the U.S	19	18	25
Shows reviewed under trade fair certification program 1/	70	60	55
Certified events held	52	35	40
Overseas promotion events held	136	150	120
Participants in DOC overseas promotion events	3,000	3,400	2,600
Trade leads from overseas promotion events	140,000	150,000	120,000
Agent leads from overseas promotion events	9,000	10,400	10,400
NTE/NTM firms assisted through CNUSA/NPIS	1,500	1,700	1,700
Contact lists provided	4,000	4,000	4,000
Agent/Distributor Service reports provided	2,900	2,700	2,500
Trade Opportunities disseminated	10,398	11,000	9,000
World Trader Data Reports provided	3,577	4,000	3,000
Country Market Surveys produced	100	110	110
Firms subscribing to Commerce Business Daily	50,000	51,000	52,000

1/ Shows are reviewed for certification in a given fiscal year for events to be held during the three following fiscal years.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Export Promotion Services	123 (123)	$13,555	111 (111)	$12,184	-12 (-12)	-$1,371

A decrease of 12 positions and $1,371,000 is proposed for Export Promotion Services. This amount was previously devoted to funding activities which are being better performed by the private sector. ITA will close its Regional Export Development Office in Bonn. Trade coordination responsibilities for Europe will be consolidated and performed in Washington. In addition, ITA will close its fixed-facility Export Development offices in Sydney and Sao Paulo. ITA will make greater use of the private sector to stage ITA sponsored trade promotion events in these markets and encourage private sector sponsorship of trade shows in these markets through its Trade Fair Certification Program. Foreign Commercial Service offices in these cities will remain open.

The position and object class detail of this decrease follows:

Title	Grade	Number of Positions	Annual Salary
Director	FSO-1	-1	-$67,940
Director	FPO-1	-1	-67,940
Deputy Director	FSO-2	-1	-56,912
Exhibit Manager	FSO-2	-1	-53,645
Director	FPO-3	-1	-43,472
Foreign Service Nationals		-7	-161,828
Total compensation		-12	-451,737
Personnel benefits			-52,263
Travel and transportation of persons			-84,000
Communications, utilities and other rents			-327,000
Printing and reproduction			-81,000
Other services			-205,000
Supplies and materials			-150,000
Equipment			-20,000
Total			-1,371,000

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Domestic operations	389 (394)	$19,241	389 (394)	$19,118	--- (---)	-$123

A decrease of $123,000 is requested that will be effected through administrative cost savings in the operation of the District Offices.

The object class detail for this decrease follows:

Title	Amount
Travel and transportation of persons	-$50,000
Communications, utilities and other rents	-25,000
Printing and reproduction	-15,000
Other services	-23,000
Equipment	-10,000
Total	-123,000

	1987 Base		1987 Estimate		Inc.(+) Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Foreign operations	706 (706)	$36,385	706 (706)	$35,994	--- (---)	-$391

A decrease of $391,000 is requested that will be effected through administrative cost savings in the operations of ITA's overseas commercial offices in 63 foreign countries at 125 diplomatic and consular posts.

The object class detail of this decrease follows:

Title	Amount
Travel and transportation of persons............	-$80,000
Other services..................................	-311,000
Total...	-391,000

INTERNATIONAL TRADE ADMINISTRATION

Summary of Requirements by Object Class
(dollar amounts in thousands)

Appropriation: Operations and administration

	Object Class	1987 Base			1987 Estimate			Inc (+) Dec (-)			Emp. 11/30
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11	Personnel compensation:										
11.1	Full-time permanent positions	2,867	2,745	$93,703	2,895	2,767	$93,777	+28	+22	+$74	2,533
11.3	Positions other than full-time permanent.......	75	150	3,220	75	150	3,124	---	---	-96	371
11.5	Other personnel compensation.			2,337			2,317			-20	
11.8	Special personal services payments..................			739			739			---	
	Total.....................	2,942	2,895	99,999	2,970	2,917	99,957	+28	+22	-42	2,904
	Other objects:										
12	Personnel benefits...........			11,822			11,704			-118	
13	Benefits for former personnel			250			250			---	
21	Travel and transportation of persons....................			7,276			7,357			+81	
22	Transportation of things.....			839			813			-26	
23.1	Rental payments to GSA.......			10,040			10,245			+205	
23.2	Rental Payments to others....			5,017			4,690			-327	
23.3	Communications, utilities, and miscellaneous charges.			5,400			4,997			-403	
24	Printing and reproduction....			3,970			3,788			-182	
25	Other services...............			29,743			30,389			+646	
26	Supplies and materials.......			2,707			2,508			-199	
31	Equipment....................			2,536			2,422			-114	
32	Lands and structures.........			25			25				
41	Grants, subsidies, and contribution			3,900			---			-3,900	
42	Insurance claims and indemnities			25			25			---	
	Total requirements........			183,549			179,170			-4,379	

Mr. SMITH. We have the Under Secretary for International Trade, Bruce Smart.

IMPORT AND EXPORT PROGRAMS

Mr. SMART. Yes, sir. I have a statement which I will submit for the record and will be very brief in my introductory remarks so that we will have maximum time for questions. I have with me, first of all, Mike Farren, who is our Deputy Under Secretary on my right, and on my left Paul Voorhees, the Financial Manager of the International Trade Administration.

The economy has been basically good for us in the last several years, but we still have, of course, the problem of the federal deficit, which puts pressure on our expenses, and the trade deficit which puts great pressure on our activities. If I go through the program areas that make up the International Trade Administration, you will see where the conditions are impacting us.

I would like to start with Trade Administration, which is a combination of import administration efforts under the antidumping and countervailing duty laws, and the steel import program, and is accompanied by Export Administration, which is basically the activities that we carry out under the Export Administration Act. In both of those components of the Trade Administration program area, we are asking for budget increases to reflect the increased workload by the Export Administration Act, and by the escalating number of antidumping and countervailing duty cases. Between the two we have a total of 68 new head count, and $4.6 million of budget.

FOREIGN SERVICE EMPLOYEES

The second area to be discussed is the U.S. and Foreign Commercial Service. Those are our people that are located around this country and in almost 100 locations abroad, to work with American industry in an effort to improve their ability and knowledge of the exporting activity. Those people are, of course, extremely active as we try to build our exports to offset the import penetration that is taking place and causing the trade deficit.

They also perform a service for the Trade Administration people in that they are the eyes of our agency, and help in the determination of whether importers of our sensitive materials are reliable or not, and whether the provisions for those imports are being followed.

In that particular activity, we are proposing a decrease in our budget of just under $2 million—$1.885 million—and a reduction of 12 heads. Those heads are in three export development offices abroad, which have been carrying on promotional services that are best left to the private sector. We are not discontinuing our presence in those cities, because we have parallel foreign commercial service people there to handle the needs of U.S. industries in those locations.

TRADE DEVELOPMENT PROGRAM

The intermediate programs, if you will, are those that analyze the trade position and the competitive position of U.S. industries, that promote their activities abroad by aiding them in trade missions, and that examine our situation country by country, particularly important now in the area of unfair trade practices, the Strike Force and the various self-initiated 301s.

The industry-related group is Trade Development. There we are asking for a reduction of $7 million, principally because of the recommendation that we discontinue the Trade Adjustment Assistance program. There will be 28 less heads involved on that basis.

INTERNATIONAL ECONOMIC POLICY

Finally, International Economic Policy, organized by country particularly important in supporting the USTR in the activities that they are undertaking in negotiations. We serve as a staff backup to them in a major way. In that particular activity we are proposing no change in dollars or heads from the base year. That, sir, is it basically. It comes down in total, then, to a request for $179,170,000, and a total of 2,895 full-time employees.

[The statement of Mr. Smart follows:]

Justification by Object Class
(dollar amounts in thousands)

Object Class		1987 Base			1987 Estimate			Inc (+) Dec (-)			Emp. 11/30
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11.1	Permanent positions										
	Executive level	4	4	$291	4	4	$291	---	---	---	3
	Senior executive service	50	48	3,260	49	47	3,206	-1	-1	-$54	48
	General schedule	2,060	1,969	68,890	2,101	2,004	69,470	+41	+35	+580	1,791
	Senior Foreign Service	25	24	1,654	23	22	1,518	-2	-2	-136	21
	Foreign Service staff	193	175	9,752	190	172	9,598	-3	-3	-154	168
	Foreign Service locals	535	525	9,856	528	518	9,694	-7	-7	-162	502
	Total, permanent positions	2,867	2,745	93,703	2,895	2,767	93,777	+28	+22	+74	2,533
11.3	Positions other than full-time permanent										
	General schedule	57	134	2,856	57	134	2,760	---	---	-96	353
	When actually employed	18	16	364	18	16	364	---	---	---	18
	Total, positions other than permanent	75	150	3,220	75	150	3,124	---	---	-96	371
11.5	Other personnel compensation										
	Overtime and holiday pay			1,812			1,792			-20	
	Cash Awards			525			525			---	
	Total other personnel compensation			2,337			2,317			-20	
11.8	Special personnel services payment										
	Department of State Foreign Service Officers			739			739			---	
12.1	Personnel benefits										
	Civil Service Retirement			5,869			5,886			+17	
	Other Retirement			491			455			-36	
	Federal Insurance Contributions Act (FICA and Medicare)			1,649			1,645			-4	
	Employees Compensation Fund			188			188			---	
	Health insurance			2,454			2,436			-18	
	Life insurance			290			287			-3	
	Overseas allowances			881			807			-74	
	Total, personnel benefits			11,822			11,704			-118	
13.0	Benefits for former personnel			250			250			---	
21.0	Travel and transportation of persons										
	Per diem			3,164			3,231			+67	
	Air fare			3,020			3,084			+64	
	Other common carrier			482			472			-10	
	GSA motor vehicles			200			195			-5	

Object Class		1987 Base			1987 Estimate			Inc (+) Dec (-)		
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
	Mileage for privately owned vehicles....................			410			375			-35
	(Overseas estimates non-add)..			(1,346)			(1,212)			(-134)
	Total, travel and transportation of persons			7,276			7,357			+81
22.0	Transportation of things									
	Transportation of things - domestic and foreign.......			591			591			---
	Freight and express to and from project...............			248			228			-20
	(Overseas estimates non-add) .			(239)			(219)			(-20)
	Total, transportation of things...................			839			813			-26
23.1	Rental payments to GSA........			10,040			10,245			+205
23.2	Rental payments to others.....			5,017			4,690			-327
23.3	Communications, utilities and miscellaneous charges									
	Federal Telecommunications System.....................			1,017			1,017			---
	Other telephone, telegraph and teletype services...........			1,898			1,656			-242
	Military Postal Service.......			94			94			---
	Postal services by USPS.......			1,183			1,183			---
	Office copying equipment rental.....................			159			134			-25
	Postal services by other countries..................			130			110			-20
	Rental of automatic data processing equipment........			275			246			-29
	Other equipment rental........			260			225			-35
	Utilities.....................			384			332			-52
	(Overseas estimates non-add)..			(1,405)			(1,047)			(-358)
	Total, communications, utilities and other rent.			5,400			4,997			-403
24.0	Printing and reproduction									
	Publications..................			1,052			1,042			-10
	Public use forms..............			158			158			---
	Commerce Business Daily.......			800			800			---
	GPO printing..................			1,174			1,144			-30
	Press releases................			32			32			---
	Envelopes (printing contract)			14			14			---
	Overseas printing.............			384			258			-126
	Other printing................			356			340			-16
	(Publications Services-WCF non-add)..................			(1,068)			(1,068)			(---)
	(Overseas estimates non-add).			(384)			(258)			(-126)
	Total, printing and reproduction.............			3,970			3,788			-182

	1987 Base			1987 Estimate			Inc (+) Dec (-)		
Object Class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
25.0 Other services									
Training:									
University.................			85			85			---
Office of Personnel Management...............			73			73			---
Other......................			506			306			-200
Maintenance of equipment......			780			480			-300
GSA alterations and repairs...			190			140			-50
Centralized Departmental Services:									
Working Capital Fund.......			8,082			8,566			+484
Automatic data processing services (WCF)...........			1,678			1,678			---
Advances and reimbursements									
Other Federal Agencies:			956			956			---
Bureau of Census...........			475			475			---
U.S. Customs Service.......			575			575			---
Department of State........			5,060			5,060			---
Security investigations......			278			178			-100
Special limitation:									
Representation.............			253			253			---
Other services...............			10,752			11,564			+812
(Overseas estimates non-add).			(3,906)			(3,264)			(-642)
Total, other services......			29,743			30,389			+646
26.0 Supplies and materials									
ADP supplies..................			554			554			---
Office supplies and materials.			776			704			-72
Envelopes (purchase)..........			40			35			-5
Other supplies and materials..			1,337			1,215			-122
(Overseas estimates non-add)..			(753)			(615)			(-138)
Total, supplies and materials................			2,707			2,508			-199
31.0 Equipment									
Office furniture and equipment			866			752			-114
ADP equipment.................			1,336			1,336			---
Motor vehicles................			334			334			---
(Overseas estimates non-add)..			(1,100)			(1,074)			(-26)
Total, equipment...........			2,536			2,422			-114
32.0 Lands and structures..........			25			25			---
41.0 Grants, subsidies, and contrubutions..............			3,900			---			-3,900
42.0 Insurance claims and indemnities................			25			25			---

International Trade Administration
Operations and administration

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$380	$380	$267
Special studies and analyses	180	180	180
Subtotal	560	560	447
Amount withheld from obligation Pursuant to P.L. 99-190		(56)	
Total	560	504	447

ITA requires consulting services to meet relatively short-term requirements for industry and/or economic expertise. Because of various ITA programs which focus on very narrow areas (specific export promotion events, negotiations, antidumping and countervailing duty cases), it is preferable to maintain the ability to obtain short-term expertise rather than a permanent staff capacity. Pursuant to P.L. 99-190, a $56,000 reduction will be implemented across all program areas in FY 1986.

Consulting Services: These services will be used in Export Administration to provide technical support for the incorporation of the Military Critical Technologies List into the Commodity Control List ($45,000 in FY 1985 and $60,000 in FY 1986); technical support for the foreign availability program ($35,000 in FY 1985); LARS/ECASS transition ($80,000 in FY 1985); systems design/engineering for ECASS ($80,000 in FY 1986, $20,000 in FY 1987); and conduct the export licensing audit program ($20,000 in FY 1985, $35,000 in FY 1986, and $35,000 in FY 1987). In Trade Development these services will provide advice for management information systems, publications, economic and program impact ($180,000 in FY 1985, $180,000 in FY 1986 and $180,000 in FY 1987). In International Economic Policy these services will provide negotiating and technical expertise to various programs, as needed, to handle short-term requirements ($20,000 in FY 1985, $25,000 in FY 1986 and $32,000 in FY 1987).

Special studies and analyses: These services will provide advice and information for special industry studies and analyses in Trade Development ($180,000 in FY 1984, $180,000 in FY 1985 and $180,000 in FY 1986).

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Operations and Administration

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1984 Actuals	1985 Actuals	1986 Estimate	1987 Estimate
Periodicals	$1,341	$925	$1,046	$1,033
Pamphlets	1,498	1,028	1,164	1,154
Audiovisuals	14	15	15	10
Total	2,853	1,968	2,225	2,197

ITA publications, periodicals as well as pamphlets, are one of the most essential tools through which the organization fulfills its mission to carry out the U.S. Government's nonagricultural trade activities, to encourage and promote U.S. exports of manufactured goods, administer U.S. statutes and agreements dealing with foreign trade, and to advise on U.S. international and domestic trade and commercial policy. Periodicals such as Foreign Economic Trends (International Economic Policy), Business America (Administration), Overseas Business Reports (International Economic Policy and Trade Development), and Global and Country Market Surveys (Trade Development), play a significant role in keeping the U.S. business community informed on current trade conditions. Commerce Business Daily (U.S. and Foreign Commercial Services), a periodical specifically mandated by the Congress, keeps U.S. businessmen aware of all U.S. Government procurement opportunities.

Individual publications (flyers, brochures, trade fair promotional materials (Trade Development), competitive assessments and economic and market research studies (International Economic Policy and Trade Development), export administration regulations (Trade Administration), foreign direct investment reports (Trade Development) play an equally essential role in keeping the business public informed on particular aspects of the global business picture which ITA is charged with disseminating. The annual U.S. Industrial Outlook is Department of Commerce's and the U.S. Government's preeminent report on domestic industry. Audiovisual products, mainly in the form of slide presentations, are currently used to a very small degree, primarily to assist Commerce District Office personnel in acquainting the business public with new or significantly revised ITA programs.

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AVERAGE GRADE AND SALARIES

	1985 Actual	1986 Estimate	1987 Estimate
Direct:			
Average ES salary	$66,232	$66,232	$66,232
Average GS grade	10.13	10.10	10.10
Average GS salary	$32,862	$32,862	$32,862
Average grade and salary established by the Foreign Service Act of 1980 (22 U.S.C. 801-1158):			
Average Senior Foreign Service salary	$66,019	$67,000	$67,000
Average Foreign Service grade	2.6	2.7	2.7
Average Foreign Service salary	$49,779	$52,000	$52,000
Average salary in foreign countries	$15,501	$17,000	$17,000

DEPARTMENT OF COMMERCE
STATEMENT BY UNDER SECRETARY FOR INTERNATIONAL TRADE
BRUCE SMART
BEFORE HOUSE APPROPRIATIONS SUBCOMMITTEE
ON THE DEPARTMENTS OF COMMERCE, JUSTICE, STATE,
THE JUDICIARY, AND RELATED AGENCIES
MARCH 20, 1986

Mr. Chairman and Members of the Committee.

I am pleased to have the opportunity to appear before you in support of the FY 1987 budget request for the International Trade Administration.

Our budget request of $179,170,000 and 2,895 positions reflects this Administration's commitment to broaden market opportunities for American business abroad, to improve the competitive posture of the U.S. internationally and to administer effectively our trade laws and regulations. International trade is important to our entire economy, and we must provide resources adequate to meet our national objectives of free and fair trade.

At the same time it is essential that we do our part to help meet Administration and Congressional deficit reduction goals. I believe our proposals realistically balance both trade and fiscal objectives.

The amount requested for 1987 includes program increases for Trade Administration of $4,589,000 and 68 positions; elimination of the Trade Adjustment Assistance program through an FY 1986 rescission of $19,290,000 and an FY 1987 decrease of 28 positions and $5,610,000; budget decreases for Trade Development of $1,473,000; and budget decreases for the U.S. and Foreign Commercial Service of 12 positions and $1,885,000.

As you know, the programs operated by the International Trade Administration of the Commerce Department are grouped into four areas: Trade Administration; Trade Development; International Economic Policy; and the U.S. and Foreign Commercial Service.

TRADE ADMINISTRATION

For the Trade Administration activity, we are requesting $55,248,000 and 832 positions, an increase of $4,589,000 and 68 positions over the 1987 base. Of the increased amount, $2,215,000 and 13 positions are for new and expanded export control activities in Export Administration resulting from passage of the Export Administration Act of 1979 as amended, and $2,374,000 and 55 positions are for antidumping/countervailing duty and voluntary steel agreement activities in Import Administration.

More Efficient Export Control Program

In Export Administration, the increased resources are necessary to meet new or expanded statutory requirements resulting from passage of the Export Administration Act of 1979 as amended.

This increase is necessary to meet those requirements which cover the following five areas:

- Licensing, where processing time for COCOM member countries will be reduced to 15 days as required by the Act. This requirement, as drafted in the legislation, requires not just faster processing of licenses but, because of a presumption of approval of a license in the absence of word to the contrary from Commerce in 15 days, it requires special liaison with the exporters affected and also close liaison work with Customs.

- Commodity Classifications, where processing time for commodity classification will be reduced from the current 270 days to 15 days in 1987 and 10 days from then on. The current hiring level for engineers is not adequate to meet this requirement. The staff on hand is continually faced with a backlog of requests. As no time limit had been imposed in the past, these requests were left for handling when time allowed. The Office of Export Administration will be able to meet the new time limits with the increased level of resources.

- Foreign Availability, where new requirements are imposed for a new class of controls (foreign policy). Assessments on commodities and technologies (under foreign policy controls) encompass a larger universe of commodities and technologies for which an allegation can be sustained than those under national security controls. In this area for example, we are in the process of assessing the availability of petroleum extraction and shipping equipment as part of our new foreign policy control workload. Without additional resources, ITA will not be able to meet the new assessment requirements and complete the projected 32 assessments that are forecasted for FY 1987.

- Foreign Policy, where Export Administration is required to assist the State Department in undertaking negotiations in an effort to achieve in non-COCOM countries the same treatment regarding exports as is practiced by COCOM countries. Without additional resources our goal to complete 20 negotiations with non-COCOM countries by the end of 1987 cannot be met. Additional resources will enable our staff to develop and present to Congress the required report on how newly proposed foreign policy controls are likely to achieve their intended purpose.

- Technical Expertise, which will enable ITA to obtain technical advice from experts available in other Federal agencies. We must have the capability to evaluate the critical technologies we are responsible for controlling. We cannot economically retain in-house technical expertise for the over 200 control entries and the emerging technologies.

Strengthened Import Administration

We are requesting an increase of 55 permanent positions and $2,374,000 for Import Administration.

Import Administration is faced with a growing number of increasingly complex antidumping/countervailing duty (AD/CVD) petitions that must be addressed within the existing investigative process. Some of the most significant new workload requirements have resulted from our self-initiation of the 256K DRAM semiconductor case along with the EPROM and 64K DRAM cases.

The former case stems from the President's Strike Force on Unfair Trade Practices. There has been a substantial increase in the overall Import Administration workload as well. Antidumping/countervailing duty orders and suspension agreements in effect have increased from 125 in 1982 to an expected 229 in FY 1986. Each of these cases adds to our responsibility for required annual reviews.

Also, 28 steel supplying countries are part of 19 agreements resulting from the President's decision to negotiate a solution to the U.S. steel industry's Section 201 complaint. The oversight workload in this area has increased and will continue to increase as new agreements are signed. Each of the 17 bilateral agreements currently negotiated require the same extensive scrutiny, monitoring, and enforcement as the other two omnibus European Community agreements.

Continued success in meeting statutory time requirements for investigating AD/CVD petitions, in conducting high quality administration reviews, as well as participation in suspension agreement discussions, and in insuing the integrity of the steel trade agreements are dependent on this increase in resources.

Export Control Automated Support System (ECASS)

An increase of $4,073,000 was requested for FY 1986 to design, develop and implement an integrated and comprehensive automated support system for Export Administration. A redesign approach to the existing system is being pursued which will meet the requirement of the foreign availability assessment program, export licensing, and the export enforcement mandate. A steering committee and project group has been formed to direct and oversee the progress of the new Export Control Automated Support System (ECASS).

During 1986, a contract will be awarded to provide near term enhancements to the system. The enhancements will include optical character recognition of license applications, automated printing of licenses, and licensing officer access to the licensing data base. In 1987, scheduled enhancements will include a reduction in license processing time for Free World non-referred cases to 6 days, improved accuracy involving data entry, and more accurate and accessible information available to licensing officers. Planned long term enhancements include providing exporters with access to the status of license applications and will require the development of an access security system.

TRADE DEVELOPMENT

For the Trade Development area, we are requesting $34,150,000 and 556 positions, a net decrease of $7,083,000 in appropriated funds and 28 positions from the 1987 base.

Eliminate Trade Adjustment Assistance

We are again proposing that the Trade Adjustment Assistance program be terminated. Our reasons remain the same; the program simply is not worth the costs.

Our assistance for industries to yield industry-wide solutions to problems concerning marketing, management, production operations and application of appropriate technology -- despite isolated accomplishments -- on balance has not worked. Despite the goodwill and increased communications between these industries and the government, there has been little translation of public resources into the hard currency of improvements in the ability of these industries to withstand import competition. Less than five percent of firms entering the program were favorably affected.

The trade adjustment assistance program singles out those firms impacted by foreign trade for assistance. Indeed it has permitted entry into a government aid program at taxpayers expense, firms that meet a simple test of having suffered some business reversals because of imports but, in general, suffer far more seriously from problems due to changes in consumer tastes, management, heavy debt loads, marketing philosophies, and other problems from which Trade Adjustment Assistance cannot hope to rescue them. The program raises false expectations among businesses that government intervention can rectify competitive disadvantages. Consequently, we propose to terminate TAA beginning in 1986 with a rescission of $19,290,000 and a budget decrease in 1987 of 28 positions and $5,610,000.

Sectoral Programs

For our industry sector and trade information and analysis programs we are requesting a budget decrease of $368,000 as a result of administrative cost savings and $1,000,000 which was provided in FY 1986 for a textile export promotion program. Textile export promotion will continue through the use of reimbursable funds and as part of the ongoing trade promotion efforts of the U.S. and Foreign Commercial Service. The remaining programs will continue to provide analyses to support government policy functions and business planning. In addition, our sectoral organizations work with small and medium-sized firms to help them participate in government-sponsored export promotion events.

We are also proposing a budget decrease of $105,000 for the Management and Policy Coordination program as a result of reduced expenses associated the International Expositions Staff in 1987, as no international expositions are planned until 1991.

INTERNATIONAL ECONOMIC POLICY

For this activity we are requesting $13,826,000 and 223 permanent positions, a level of funding essentially unchanged from last year. Our responsibilities in this area are to contribute to the development of regional and multilateral economic policies, to advance U.S. trade and investment interests and to provide marketing services which facilitate U.S. exports of goods and services.

The International Economic Policy (IEP) area is organized on a regional basis with policy, analytical, and marketing functions combined for individual countries and geographic areas.

Through its Office of Multilateral Affairs, IEP assists interagency implementation of the GATT Agreements and participates in developing U.S. positions to be taken in the Organization for Economic Cooperation and Development (OECD) and United Nations Conference on Trade and Development (UNCTAD). Working with the Foreign Commercial Service and other parts of ITA, IEP is responsible for monitoring foreign trade and investment practices for compliance with the Multilateral Trade Negotiations (MTN) codes and these bilateral/multilateral agreements. In addition, we work closely with the United States Trade Representative, through the interagency process, on General Agreement on Tariffs and Trade (GATT) policy matters.

U.S. AND FOREIGN COMMERCIAL SERVICE

For our U.S. and Foreign Commercial Service activity we are requesting $75,946,000 and 1,284 positions inclusive of three budget decrease proposals. In Domestic Operations we are proposing a decrease of $123,000 and in Foreign Operations we are proposing a decrease of $391,000: both as a result of administrative cost savings in the operation of these programs. In the Export Promotion Services program we are proposing a decrease of 12 positions and $1,371,000. This amount is primarily devoted to funding activities which are being performed better by the private sector and includes the closing of the Regional Export Development Office in Bonn and the Export Development offices in Sydney, Australia and Sao Paulo, Brazil. ITA will encourage and make greater use of the private sector to stage ITA sponsored trade promotion events in these markets. Foreign Commercial Service Offices in these cities will remain open.

The U.S. and Foreign Commercial Service promotes the growth of U.S. exports through delivery of services at sites convenient to the business community in the United States and in overseas markets. These sites include 48 District Offices in the United States and 125 diplomatic and counsular posts in 63 countries. We have made substantial improvement over several years in enhancing the expertise of our personnel and the business services we can provide.

Mr. Chairman, this concludes my prepared statement. I will be pleased to answer any questions you or the subcommittee may have.

OVERSEAS PERSONNEL REDUCTION

Mr. SMITH. We have got a big security supplemental request for the State Department to protect our embassies, personnel, information, and so forth. This comes at a rather awkward time. One of the ways we are going to have to handle this problem is to reduce the number of personnel overseas to the lowest number that is needed. Seventy percent of our people overseas are not State Department people. They belong to other departments and agencies. Have you in the last six months been in negotiations with the State Department or talking to anybody about whether or not you need all the people you have overseas?

Mr. SMART. If anything, sir, the pressure on us coming from industry and from other sectors is that we need more rather than less. We have run a study of our staffing of overseas trade promotional people against the same kinds of people that our major trading competitors have—the Japanese, the Canadians, the Germans, and so on—and we find that, typically, against somebody like the Japanese, we probably have one-fifth the number of people in proportion to our GNP, the population of our country, that these major competitors have. So that if anything, our industry is undersupported rather than oversupported by government personnel helping them to export their products.

Mr. SMITH. That is the argument you would use in talking to the State Department about whether you need all the people. But my question was, have you had conversations with State Department and have they asked you to justify this?

Mr. SMART. In this specific area I personally have not.

Mr. FARREN. Sir, we have been discussing with State the security needs overseas, and our requirements are included in the State Department appropriation. However, in respect to reducing personnel, I don't believe that that has specifically come up. The difficulty that we confront is we are in 127 posts overseas, so we are spread very thin. In some respects, to reduce personnel at all would simply be to eliminate our presence in the given country.

Mr. SMITH. Let's get for the record a list of the posts, the number of people at each post, and some kind of a description of what they do. Involved in this, of course, is whether or not you could contract for similar services without having people there. This is not to say you don't need more people or that you need less people, but the State Department is going to have to have some kind of handle on this thing. It is going to have to be asking for justifications to every department. It bothers me a little bit that you haven't had any contact with them asking you to justify every one of your positions.

Mr. FARREN. Sir, I don't believe we have. We can check with U.S. and Foreign Commercial Service. They have been in direct negotiations with the State Department specifically as it relates to the cost of additional security provisions. In one respect we have reduced staff. We are eliminating the regional export development offices in Bonn, Sao Paulo, and Sydney, Australia, so that will result in a reduction of overseas personnel. In respect to the commercial offices, we can get you the information that you specifically requested.

Mr. **Smart**. We have here a list of each post, the number of Americans there, the number of foreign nationals employed there, but we do not have the specific description of what they do. I think that would be a generic description, because it would be applicable to all of the posts. We can get you that information.

[The information follows:]

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FOREIGN COMMERCIAL SERVICE OPERATIONS

There is no adequate substitute to having American Foreign Commercial Service officers in our posts abroad. Contractors would not be able to deal with either foreign governments or the business community without formal and official ties to the embassies and consulates; they would not be taken seriously.

As far as local hire employees are concerned, we do have some on contract rather than full-time hire. However, contracts cut both ways: either side may walk away from them with little notice. We find it preferable in most cases to have the long-term relations with our local hire (Foreign Service National) employees that career service brings.

Officers of the International Trade Administration (ITA) serving overseas formulate and operate a commercial program that will realistically develop additional trade opportunities, support viable trade promotion programs and activities and otherwise provide the full range of standard commercial service. The ITA respresentatives serve as members of the Ambassador's country team and the primary advisors for commercial policy matters and activities. This encompasses such activities as: (a) exploiting trade and investment opportunities; (b) assisting U.S. firms in obtaining agency, representational, licensing, joint venture, and franchise arrangements; (c) marketing information, product research, and reports on the business climate and economic and foreign trade trends for use by the American business community; (d) assisting U.S. firms in bidding for major contracts and products; (e) protecting U.S. firms against discriminatory practices, and cases involving trade complaints or related disputes; (f) promoting foreign buyer visits to U.S.; (g) encouraging and facilitating host country investments in the U.S.; (h) developing and maintaining close and frequent high-level consultative contacts with senior officials throughout the host country government, on a wide range of commercial problems and/or activities; (i) making representations and engaging in negotiations with senior host country representatives on a wide range of bilateral and multilateral trade, investment, and related issues: and (j) supporting export and import enforcement at selected locations overseas.

The International Trade Administration has American staff assigned to the following posts:

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INTERNATIONAL TRADE ADMINISTRATION AMERICAN POSITION OVERSEAS

Country	U.S. and Foreign Commercial Service	Export Promotion Services	Import Admin.	Export Enfor.	Detailees *
Post					
Algeria					
Algiers	2				
Argentina					
Buenos Aires	2				
Australia					
Canberra	1				
Melbourne	1				
Perth	1				
Sydney	3				
Austria					
Vienna	2			2	
Barbados					
Bridgetown	1				
Belgium					
Brussels	2				1
Brazil					
Brasilia	2				
Sao Paulo	2				
Rio de Janerio	1				
Cameroon					
Douala	1				
Canada					
Montreal	1				
Calgary	1				
Ottawa	2				
Toronto	2				
Vancouver	1				

INTERNATIONAL TRADE ADMINISTRATION AMERICAN POSITION OVERSEAS

Country Post	U.S. and Foreign Commercial Service	Export Promotion Services	Import Admin.	Export Enfor.	Detailees *
Chile					
Santiago	1				
China					
Beijing	7				
Guangzhou	2				
Shanghai	2				
Shenyang	1				
Colombia					
Bogota	2				
Costa Rica					
San Jose	1				
Denmark					
Copenhagen	1				
Dominican Republic					
Santo Domingo	1				
Ecuador					
Guayaquil	1				
Quito	1				
Egypt					
Alexandria	1				
Cairo	2				
Finland					
Helsinki	1				

INTERNATIONAL TRADE ADMINISTRATION AMERICAN POSITION OVERSEAS

Country Post	U.S. and Foreign Commercial Service	Export Promotion Services	Import Admin.	Export Enfor.	Detailees *
France					
Paris	7				
Germany					
Bonn	5	3			
Dusseldorf	2				
Frankfurt	1				
Hamburg	1				
Munich	2				
Stuttgart	1				
Greece					
Athens	3				
Guatemala					
Guatemala	1				
Honduras					
Tegucigalpa	1				
Hong Kong					
Hong Kong	4				
Hungary					
Budapest	1				
India					
Bombay	1				
New Delhi	3				
Indonesia					
Jakarta	5				

INTERNATIONAL TRADE ADMINISTRATION AMERICAN POSITION OVERSEAS

Country Post	U.S. and Foreign Commercial Service	Export Promotion Services	Import Admin.	Export Enfor.	Detailees *
Iraq					
Baghdad	1				
Israel					
Tel Aviv	1				
Italy					
Milan	4				
Rome	3				
Ivory Coast					
Abidjan	1				
Jamaica					
Kingston	2				
Japan					
Tokyo	11	1	3		
Osaka Kobe	2				
Kenya					
Nairobi	1				
Korea					
Seoul	7				
Kuwait					
Kuwait	1				
Malaysia					
Kuala Lumpur	2				

INTERNATIONAL TRADE ADMINISTRATION AMERICAN POSITION OVERSEAS

Country Post	U.S. and Foreign Commercial Service	Export Promotion Services	Import Admin.	Export Enfor.	Detailees *
Mexico					
Mexico City	7	1			
Guadalajara	1				
Monterrey	1				
Moracco					
Casablanca	1				
Netherlands					
Amsterdam	1				
The Hague	1				
Rotterdam	1				
New Zealand					
Wellington	1				
Nigeria					
Lagos	5				
Kaduna	1				
Norway					
Olso	1				
Pakistan					
Karachi	1				
Panama					
Panama	1				
Peru					
Lima	2				

INTERNATIONAL TRADE ADMINISTRATION AMERICAN POSITION OVERSEAS

Country	U.S. and Foreign Commercial Service	Export Promotion Services	Import Admin.	Export Enfor.	Detailees *
Post					
Philippines					
Manila	2				
Poland					
Warsaw	1				
Portugal					
Lisbon	1				
Romania					
Bucharest	1				
Saudi Arabia					
Dhahran	1				
Jeddah	3				
Riyadh	5				
Singapore					
Singapore	3	1			
South Africa					
Johannesburg	2				
Spain					
Barcelona	1				
Madrid	3				
Sweden					
Stockholm	2			1	
Switzerland					
Bern	2				

INTERNATIONAL TRADE ADMINISTRATION AMERICAN POSITION OVERSEAS

Country Post	U.S. and Foreign Commercial Service	Export Promotion Services	Import Admin.	Export Enfor.	Detailees *
Geneva					2
Thailand					
Bangkok	2				
Turkey					
Ankara	2				
Istanbul	1				
U.A.E.					
Abu Dhabi	1				
Dubai	1				
United Kingdom					
London	6				
USSR					
Moscow	3				
Venezuela					
Caracas	4				
Yugoslavia					
Belgrade	1				
	199				
Unestablished	3				
TOTALS	202	6	3	3	3

* Detailees are ITA (US&FCS) employees detailed to other Federal agencies (Brussel-1 position to NATO; Switzerland-2 positions to USTR).

FIELD OFFICES IN THE U.S.

Mr. **Smith**. You are calling them field offices in the United States?

Mr. **Smart** Yes, sir.

Mr. **Smith**. What are you doing in that regard?

Mr. **Smart**. Basically, those offices, as I remember it there are 66 located across the country in United States cities, staffed by our people who are the liaison with local industry who may have export potential but perhaps does not yet know how to export or does not know enough about a particular country, isn't clued in to requests or opportunities to bid that occur in individual countries, and by linking those people with the foreign people, we can hook up our companies to the opportunity abroad.

They also are the liaison with the so-called District Export Councils, which are regional representations of business people, so that we have an interface with the private sector on a local and regional basis.

Mr. **Smith**. With regard to these district export councils, my observation has been that usually they are good people. They are people who have had experience in export. They could offer a lot of incentive and advice to people that are not exporting that could export, but there is no exposure. People don't know about them.

There must be some way to let more people at the local level know that there is such a council, and that there is somebody they ought to be talking to and see if they think that they have got any potential. Do you agree with that?

Mr. **Smart**. I visited about four or five of these locations, and met with all of the heads of the District Export Councils last fall, and with the local councils on two or three of the occasions when I was in those cities. My impression is pretty much in line with yours, that we have a resource here that is not fully utilized, or deployed and that we have an opportunity to do better in publicizing it than we have done.

I have to sit here and say that I think in fact our whole public affairs and public relations office in ITA needs to be a little more aggressive and a little less reactive, and we have made personnel changes in that direction quite recently.

Mr. **Smith**. Do you now have—I know you have been computerizing this area, but do you now have a data base so that whenever an export opportunity is reported, that it can get back down to the people that might be able to work with it?

Mr. **Smart**. I think whenever would imply 100 percent success—and I am sure we are not there—we are trying to get computerized, however, so that we can feed from the foreign location where the opportunity is to the U.S. companies that might be interested in the shortest possible time frame. Yes, sir, we are trying to do that.

EXPORT PROMOTION

Mr. **Smith**. Are you talking about U.S. companies that are already in the export business, or U.S. companies that are not exporting that might be able to fill this?

Mr. **Smart**. Both.

Mr. SMITH. How do you get the names of the people who are not exporting yet?

Mr. SMART. By making a great many cold calls, by our local people in the United States, who know the industrial makeup of their particular region, who determine who is exporting and go to see people who seem like they have potential for doing it or not, and visiting them and discussing it with them. We have a considerable outreach. In fact, we have been criticized for having quotas for such calls, and perhaps emphasizing numbers rather than quality a little too much. But we are trying to push these people to find new-to-export companies that have the opportunity and have not yet realized it.

Mr. SMITH. You are depending on the field offices to do that?

Mr. SMART. Yes, sir. We obviously oversee the field office from Washington, and they have supervision. But we rely on the local manager to do that.

Mr. SMITH. Do you think all of them are doing it, or are they just using the National Commerce List?

Mr. SMART. In the offices that I have been in, which is obviously not all 66, I have been pleased with what seems to be their knowledge of their territory, and with the feedback that I have gotten about them from members of the District Export Councils, who are private sector exporters, and who would be able to judge the quality of our people.

Mr. SMITH. What they have got to have is to start with a belief that these lists that they have had in the past are not sufficient. They have got to go beyond it on their own.

Mr. SMART. Yes, sir, I agree.

Mr. SMITH. I don't think there is any substitute for personally using their own resources, whether it is the Yellow Pages or whatever it is, to try to find people who are not on their list. Do you think they are doing that?

Mr. SMART. Well, I would have to say that, based on my other life in the private sector, where I was a businessman for 36 years and a sales manager for probably 10 of those, my impression is that we have a well-motivated and good sales force, generally speaking, in the offices I have been at.

Mr. SMITH. They can be a good sales force but still operating off of lists of people that are already in the business. Are they motivated to going beyond that?

Mr. SMART. Sir, perhaps I should say that the first requirement of a good salesman is to know his territory and know where his prospects are, and develop a prospect list, and then, only then, can he apply his persuasive talents to getting the order, and I am comfortable that we are doing a good job, as I say, in the offices that I have been in. I am not certain that all 66 of the offices are up to the standards that you or I would wish them to be, and that is one of the things we obviously should pay attention to.

SMALL BUSINESS ADMINISTRATION

Mr. SMITH. Are they interfacing? We have been giving SBA money to develop a data base. The Small Business Development

Centers are also doing some of this. Are you interfacing sufficiently with those two agencies?

Mr. **Smart**. I can't speak to that. Often small businesses that would qualify under those programs are pretty small to be thinking about exporting. That is not to say that they all are too small. But you do have to have a certain scale before you can afford and find worthwhile the effort that it takes to build an export business. Do you have any comment on that, Mike?

Mr. **Farren**. We have been coordinating with them, Mr. Chairman. I think we will see more of that in the future. Also in addition to working with SBA, the most fertile ground for us is to get state and local governments involved in it. Bringing the contacts with local business, small business down to the lowest government unit will certainly help, and states have shown a real interest in getting involved in it.

Going back as well to your question relating to the data base, we currently have most of the hardware on hand. The software has been developed. The data base is in the process of being put together. That will also give us an opportunity of getting information out to state and local governments and local entities, to give us a better opportunity to reach small business that would be interested in exporting, particularly new-to-exporting small businesses.

Mr. **Smith**. In the case of SBDCs, they are prohibited from getting more than 50 percent federal money. They have to have state and local support, and in many cases they are not brand new businesses. They have been in business, and in many cases, they could solve their problem by having some export business. They have got a product but they don't know how to market it. That is one of the reasons SBDCs were set up. It was to help them learn how to market their product. But in both cases, both of them have some type of data base.

Mr. **Smart**. We will take a look at it.

Mr. **Smith**. Your field people ought to be availing themselves of it, and SBDCs are supposed to be constantly updating their data base. In some cases they just go out down the street finding out what people are doing.

Mr. **Smart**. Local chambers of commerce and these sorts of groups are helpful in this area. Incidentally, we have our records which would show that in 1985 we had something over 700 firms new to export, that have been brought into exporting for the first time, and 2,300 that had entered some new country that they have not been in before.

Mr. **Smith**. What was the previous year?

Mr. **Smart**. I don't have the previous year figure, but we figure that that is about the normal pace that we would look at in future years. So my guess is it is fairly similar to the past. I don't have it for last year.

EXPORT PROMOTION

Mr. **Smith**. With regard to the activity within foreign countries, I know there is a great variation between countries. It depends on who your representative is in that country to a large extent. But assuming that he is looking and he finds some product that he thinks that we could sell in that country and we would be competitive, he gets that back to your central office?

Mr. SMART. Yes, sir.

Mr. SMITH. Are computerized to get that to all of your 66 field offices?

Mr. SMART. We are getting there. We are not there yet. The principal contacts of those people, one of their principal contacts, is with the American Chamber of Commerce in each of these principal countries, and in the visits that I have made overseas, usually our commercial counselor, who is attached of course physically to the embassy, will get me together with representatives of that American Chamber of Commerce, so that we will discuss conditions in the country, and I have been impressed by the ability of our people to bring in the leaders of American companies overseas, and I get the feeling that they are well clued in to the American business community, and have also seen them very effectively move through the ministries of foreign governments.

So, again, I think we have increasingly good staff. We are trying to get more and more of those people to be former businessmen as opposed to former State Department Foreign Service officers, which a lot of them were when we took this activity over in 1980.

Mr. SMITH. On Committee trips overseas we talk to the American business community. Of course, they are there because they are in business.

Mr. SMART. Correct.

Mr. SMITH. They are primarily interested in their business. We don't want to overlook the Japanese method of walking down the street sometimes with a foreign national, and seeing what is in the window or pricing things, and if it looks like something is priced, relatively speaking, high or higher than it is in the United States, finding out why we aren't selling. I don't think you will get that kind of service out of the Americans that are in those countries. You have to get it out of your own office.

Mr. SMART. We have one thing in this area that has been interesting to me. We have a jointly funded arrangement with the Electronics Association of America, in which we are sponsoring a Japanese office for that trade association together with the industry, in an effort to give them an overseas foothold and window into the Japanese electronics market, so that we have a private sector activity in the country in Tokyo with Japanese-speaking employees of that trade association, supplementing what our people might find with their very specific knowledge of electronics opportunities, and that has been very successful.

The electronics association would like us to do the same thing for them in other countries. We think perhaps if we had the money to do more of that, it should be for another industry rather than double-dipping for the electronics industry, but it is another way of going at it, where we can combine our knowledge of the country with an industry's specific knowledge of its products and its companies, and get some companies in there that are not already in the country.

Mr. SMITH. When you go down the street and you see a merchant in a country that has no American goods, but he seems to have Japanese goods, West German goods, it means that they are permitting imports. There must be something that we can import. That is quite often what you see, isn't it?

Mr. SMART. Yes, sir. The strength of the dollar, of course, has had something to do with that in recent years.

TRADE ADJUSTMENT ASSISTANCE

Mr. SMITH. There have to be some things even in electronics where we can produce either a better product or a cheaper one. There have got to be some things. The trade adjustment assistance program: what is the authorization on that?

Mr. SMART. As I understand it, the current authorization has been passed by the House, and is headed for the Senate.

Mr. FARREN. I believe it is headed for the President.

Mr. SMART. Headed for the President, and that will speak to this fiscal year, and continue with it as it has been. We are recommending in our fiscal year 1987 budget, however, that it be discontinued.

Mr. SMITH. You had a rescission proposal?

Mr. SMART. Yes.

Mr. SMITH. You had proposed rescissions that will expire April 15?

Mr. SMART. That is right.

Mr. SMITH. Have you been proceeding as if the rescission would be approved or disapproved?

Mr. SMART. Well, under advice of counsel, until now we have been proceeding as if we would have to shut down the program. We are now in a position to wait until the rescission is—

Mr. FARREN. We have been in a position, of course, to proceed as though the rescission would be approved, based on the December 19 lack of authorization. At this point we will continue to press for the rescission request to be approved. However, it will put us in a position to basically keep the Trade Adjustment Assistance Centers going. They are currently in a state of closeout, and we would go back and allow that funding to begin again, and give them direction not to proceed to closeout, as we had anticipated. The closeout date had been April 30. That was based on the lack of authorization as of December 19.

Mr. SMITH. Does that mean these two months are totally lost with regard to administering the program?

Mr. FARREN. Excuse me, Mr. Chairman, which two months?

Mr. SMITH. The two months that transpired between the time the rescission was sent up and April 15.

Mr. VOORHEES. There has been no processing of applications.

Mr. SMITH. Do you continue to take applications?

Mr. VOORHEES. I don't know the disposition of any new applications.

Mr. FARREN. Mr. Chairman, we have not been taking applications, but not based on the rescission. We have not been taking applications based on the lack of authorization. We would now be in a position to tell them to continue on with their current programs and also accept the applications. Business would carry on as usual, but that doesn't deter us from our interest in seeing that the rescission be affirmatively acted on by Congress.

Mr. **Smith**. Some departments on rescissions continue to accept applications. Of course, you may not approve them.

Mr. **Farren**. Mr. Chairman, we would be accepting applications as of now. I am trying to draw a distinction between the position we have been in without authorization and the position we are in now simply with a pending rescission. It is difficult. Without authorization we are not accepting applications. We are also advising the TAACS to proceed to closeout. We are now in a position to tell them no longer to proceed to close out, to begin accepting applications, but none will be funded in anticipation of a positive response on our rescission request.

Mr. **Smith**. Will the sequestration result in any RIFs or furloughs?

Mr. **Farren**. No, sir.

REPROGRAMMINGS

Mr. **Smith**. What about reprogrammings?

Mr. **Farren**. There has been reprogramming. The 4.3 percent reduction across the board resulted in an overall cut of the budget of $8.2 million. We have been able to accomplish that without closing any offices or having any RIFs. We do anticipate reprogramming, but it will basically take care of a shortfall in the U.S. and Foreign Commercial Service resulting from a problem with currency exchange. Other than that, that is the only reprogramming we foresee.

Mr. **Smith**. Where is that reprogramming?

Mr. **Voorhees**. It is at OMB right now.

Mr. **Brown**. It was sent to OMB on March 14, Mr. Chairman.

Mr. **Smith**. How long does it take them to get something out?

Mr. **Brown**. I understand they will complete their review early next week. In fact, they are coming to meet with officials of ITA on Monday.

Mr. **Smith**. What about the NOAA reprogramming; do you know about that?

Mr. **Brown**. That is also pending at OMB and was sent at the same time. We have not received any questions from OMB at this point, but I would anticipate that all our reprogrammings should be processed by OMB and we should have their reactions by late next week.

BUDGET SAVINGS

Mr. **Smith**. Did you in planning your 1987 budget then ask for restoration of this 4.3 percent?

Mr. **Farren**. It would be our anticipation, sir, that the 4.3 percent would be restored, yes, Mr. Chairman.

Mr. **Smith**. So most of those reductions then are not going to be permanent savings?

Mr. **Farren**. In some respects, Mr. Chairman, it will result in permanent savings, because we have made administrative adjustments internal to individual offices and bureaus, but in terms of an overall net savings in fiscal year 1987, no.

Mr. **Smith**. In many cases you just postponed an expense?

Mr. **Farren**. In some respects, Mr. Chairman, yes. A number of the savings were accomplished through administrative changes and efficiencies. We had the regional export development offices that are closing down. I don't want to diminish the fact that there have been some real savings coming out of the process.

Mr. **Smith**. Give us a breakdown of what are real savings compared to what is really a postponement of an expense.

Mr. **Farren**. Yes.

Mr. **Smith**. Thank you.

[The information follows:]

Postponed Expenditures

Nearly all of the reductions taken by ITA should be classified as postponements. Types of actions which would fall under this category include select hiring freezes and other delays in filling vacancies; elimination of select FY 1986 trips; reduced employee training, etc. These activities cannot be viewed as permanent savings because they represent a constrained level of activity which is not viable over the long term.

Several other reductions will be taken in anticipation of proposed FY 1987 budget reductions. A case in point is the closing down of the regional export development offices where activity and expenditure levels are being curtailed. However, the full year savings associated with these actions are already reflected in the FY 1987 budget.

Additional "real" permanent savings resulting from administrative changes and efficiences are still being reviewed by ITA management. Once questions addressing the long term impact of these actions are answered, ITA will know whether or not to treat these reductions as savings or postponements and determine the true "magnitude" of our savings resulting from this exercise.

Mr. **Smart**. Mr. Chairman, thank you very much. It is a fascinating subject, and if you have more questions sometime I would be delighted to answer them.

[Questions for the record follow:]

Questions for the Record by Congressman Smith

International Trade Administration

Trade Adjustment Assistance

QUESTION:

What was the level of obligations that you provided in fiscal year 1985?

ANSWER:

In 1985, the International Trade Administration obligated (approved) $0.4 million in direct loans. Guaranteed loan commitments totaled $3.0 million (face value), although ITA did not actually obligate funds. ITA obligated $18.0 million in grants in FY 1985.

QUESTION:

What was the level of applications you had for 1985?

ANSWER:

In 1985, the total applications in-house consisted of 29 firms requesting direct loans of $12.2 million and loan guarantees of $33.9 million. Of these 29, nine firms requesting $2.5 million in direct loans and $14.1 million in guaranteed loans were submitted during fiscal year 1985. The remaining 20 firms were carried over from previous fiscal years.

QUESTION:

What is the level of applications you have for guaranteed loans for fiscal year 1986?

ANSWER:

There are presently 7 applications for guaranteed loans, with a face amount of $8.0 million.

QUESTION:

Do you feel that you could fulfill the entire availability of guaranteed loans should the proposal not be enacted?

ANSWER:

If the Trade Adjustment Assistance program receives new legislation that includes a loan/loan guarantee program ITA estimates that $6.0 million in guaranteed loans could be approved.

QUESTION:

What was the level of guaranteed loans you provided in 1985?

ANSWER:

In 1985, ITA entered into commitments for $3.0 million in loan guarantees.

QUESTION:

What was the level of applications for guaranteed loans for fiscal year 1985?

ANSWER:

ITA received new applications for $14.1 million in loan guarantees during fiscal year 1985.

Fiscal Year 1987 Activities

QUESTION:

What is the status of the authorization for the various portions of your account which are unauthorized?

ANSWER:

The Defensive Production Acts Amendment of 1984, authorizing portions of ITA's Industrial Resource Administration program expires on September 30, 1986. An administration bill was drafted by the Federal Emergency Management Administration (FEMA) with ITA's input to extend the Act for five years. Hearings with the House Banking Committee are scheduled to take place in May.

QUESTION:

In your other increases of $10,350,000 you are requesting a full year cost increase of $3,030,000 for the 25 percent lapse. Do you still need all of these positions related to export enforcement for fiscal year 1987?

ANSWER:

OEE's need for the 74 additional personnel approved in the fiscal year 1986 budget is greater now than at the time of the original increase request.

The unexpected Congressional reduction (75% lapse) of Export Enforcement's FY 1986 increase request for this expansion effort combined with recent internal budget cuts because of deficit reduction legislation has slowed our hiring timetable. However, OEE has initiated a time-phased hiring program which will fill the 74 additional positions by the end of this fiscal year. We will have those 74 persons with us at the beginning of fiscal year 1987. We will need to keep them. OEE's ability to effectively carry out its statutory responsibility of protecting U.S. national security and foreign policy interests through the prevention of illegal exports and diversion of controlled technology, depends on our ability to hire and retain the people needed for the job.

QUESTION:

You are requesting an increase of $2,821,000 for GSA space rental for 1987. Can you tell us is this increased space cost requirements or is this an increase in rental rate for existing square footage. What locations are affected by this rental increase?

ANSWER:

The requested increase is directly related to proposed GSA rental rate increases both at headquarters and in the (domestic) field for existing space.

QUESTION:

You are requesting an increase of $1,035,000 for overseas costs of operations attributable to foreign service national wage adjustments and price increases. What is the total cost of overseas operations for your agency?

ANSWER:

In FY 1987, the U.S. and Foreign Commercial Service expects to spend approximately $35,994,000 on overseas operations.

QUESTION:

What other efforts have you employed in order to reduce expenditures overseas?

ANSWER:

We have instituted a hiring freeze on Foreign Service Nationals and reduced contract hires. In addition, we have cancelled or deferred all non-essential other object expenditures for the balance of FY 1986.

Domestic Contracts

QUESTION:

You are requesting an additional $503,000 to fund cost increases in domestic contracts which increases your 1987 request for this amount to $10,553,000. What domestic contract and purchase services do you obtain for $10,553,000? Please list for the record all of these contracts and what services were performed for these funds.

ANSWER:

A listing of major domestic contracts and related services, by ITA program is provided below. Miscellaneous minor contracts (under $10,000) are not listed.

Trade Development - $1,155,000

1. $188,000 - ADP support services
2. $323,000 - Sectoral statistical data
3. $12,000 - Telecommunication services
4. $21,000 - Textiles program promotions
5. $10,000 - Teleprocessing services
6. $55,000 - SIC code development study
7. $50,000 - Study of Japanese technology
8. $30,000 - Mailing services
9. $50,000 - Coal trade development project
10. $207,000 - Auto statistics
11. $39,000 - EDA service for TAA management
12. $170,000 - Shippers export declarations data

International Economic Policy - $346,000:

1. $24,000 - Computer time sharing
2. $8,000 - Econometric models
3. $6,000 - Miscellaneous economic reports
4. $308,000 - Dalian Institute

Trade Administration - $5,260,000:

1. $54,000 - Law enforcement training
2. $120,000 - Law enforcement vehicle leasing
3. $97,000 - Radio antenna site lease and basic operations
4. $15,000 - Domestic intelligence reporting service
5. $200,000 - Accounting services associated with antidumping and countervailing duty cases
6. $153,000 - Auditing services associated with the export licensing program
7. $15,000 - ADP services related to foreign availability
8. $1,000,000 - Technical research and consultations related to COCOM list review and commodity classifications
9. $38,000 - Export administration regulation automation and promulgation
10. $840,000 - Licensing data entry services
11. $400,000 - Systems analysis and programming support to maintain ECASS

12. $250,000 - Systems analysis, design, etc. for installation of secure licensing equipment
13. $98,000 - Computer terminal equipment maintenance
14. $80,000 - Industry survey
15. $1,900,000 - ADP Timesharing

U.S. and Foreign Commercial Service - $1,839,000:

1. $50,000 - Mailing list services for Federal Procurement Conferences
2. $15,000 - Background reports on U.S. firms
3. $700,000 - Domestic WANG equipment maintenance
4. $120,000 - Domestic telecommunications network
5. $350,000 - Software development and programming
6. $50,000 - Systems operations technical support
7. $50,000 - Mailing contracts related to promotion of products and services
8. $325,000 - Training
9. $130,000 - Regional newsletters
10. $49,000 - Computer services

In addition, ITA has administrative support contracts totalling $1,554,000:

1. $199,000 - Accounting support services
2. $200,000 - Rental and maintenance of telecommunications equipment
3. $72,000 - Telegraph equipment rental and service
4. $10,000 - Computer and word processing equipment cabling
5. $10,000 - IBM and compatible equipment maintenance
6. $33,000 - Electronic telephone locator system maintenance
7. $384,000 - WANG facilities management services
8. $395,000 - Maintenance for Wang Alliance terminals (word processing), printers, PC's etc.
9. $85,000 - Computer and word processing supplies
10. $66,000 - Air conditioning for the Wang facilities room
11. $80,000 - Construction and electrical work on the Wang facilities room
12. $20,000 - Power conditioner for the Wang facilities room

QUESTION:

Can you effect any savings in this amount?

ANSWER:

ITA continually reviews contracts as well as other expenditures for potential savings. While savings could be effected in the contract area, there would be an impact on program operations. The magnitude of the impact would depend on the size of the savings.

QUESTION:

You are being charged $1,526,000 for increased costs related to the Department's Working Capital Fund. Is this for the same level of services you received in 1986 but at a higher rate?

ANSWER:

A major portion of this Working Capital Fund increase relates to uncontrollable adjustments to base in the areas of payroll costs (within-grade step increases, pay restoration, etc.) for WCF employees and GSA rental rate increases effecting space occupied by WCF employees. A smaller portion relates to the cost of increased services provided by the Office of the General Counsel.

QUESTION:

Discuss the management savings of $107,000 you plan to achieve savings in for fiscal year 1987.

ANSWER:

These savings will be prorated in an across-the-board manner to all ITA programs and will be addressed by the individual programs during the implementation of FY 1987 spending plans.

QUESTION:

What was the savings for 1986 relating to reducing the costs of grades 11 through 15?

ANSWER:

The International Trade Administration has steadily reduced average grades from 1981 through the present. In FY 1986, the International Trade Administration reduced its FY 1986 budget by $450,000 to achieve the mandated grade bulge reduction target.

QUESTION:

You are requesting an increase of $2,215,000 and 13 positions for export administration. This is an increase over the $20,849,000 you have in your base level of your request. And your justification states that each of the positions relates to specific requirements in the Export Administration Amendment Act of 1985:

What would be the effect on your operations if the increase in positions requested to meet the requirements of section 10(k)(1-2) were not provided? What is the significance of not decreasing the processing time of commodity classifications to ten days?

ANSWER:

In the amendments to the Export Administration Act signed into law in July 1985, the Congress mandated that commodity classifications be performed by the Commerce Department within ten days. In addition, the amendments called for the decontrol, i.e., no license required, of exports to COCOM member countries of certain technologies and commodities which fell below certain technical parameters used to control exports to the Soviet Union and the Warsaw Pact. The decontrol requirement of the amendments was met last August with the establishment of a general license, G-COM.

Absent the resources requested, Commerce will not be able to meet the statutory deadline of ten days to process commodity classifications resulting not only from the normal course of business. The effect of such actions on U.S. exporters would be to delay their submission of an application for an export license to the point where sales would be lost and U.S. exports would suffer. In addition, Commerce's inability to perform commodity classifications will necessarily hamper efforts to enforce U.S. export controls since key to any violation of such controls is the government's ability to determine from a technical point of view whether or not a commodity or technology is in fact controlled.

QUESTION:

What is the impact of not providing the increase of three positions requested to perform the licensing task? What would the backlog be if the reductions of fifteen days were not implemented?

ANSWER:

Individual Validated Licenses for COCOM Member Nations are running at about 195 per day. This equates to about 49 per licensing officer (including the Supervisor). The workload is currently being handled through the use of overtime and temporary workers. Not providing the three positions will mean that the Department will not be able to process the license applications in the fashion called for by the Act. Some 145 applications will have to be referred to other licensing activities each day resulting in a delay in COCOM processing and a slowdown to the other work in process.

The adverse impact of slower processing on these licenses is unique in the case of licenses for export to our COCOM allies. By statute, an exporter is free to ship a commodity, for which a license application has been submitted on the 16th day after the application has been made unless they are informed not to ship by the Department of Commerce. Thus, should we fail to process these applications fast enough, two things could happen: (1) we will be forced to send out letters to all applicants as soon as the license application is received that states that they should not ship on the 16th day (which itself will require a significant amount of staff-hours to do), and (2) we will be forced to notify most applicants on or before the 30th day that their application is returned without action, thereby defeating the purpose of the statute.

With respect to the backlog, handling these cases in the normal fashion will increase the work load of the licensing branches and will push more cases over the statutory timeframes called for in the 1985 Amendments.

QUESTION:

What is the effect of not providing the increase of three positions requested to meet the requirements for foreign availability assessments? You state that without these resources you won't be able to meet the new requirements and also complete the projected 32 assessments as forcasted for fiscal year 1987. What would you be able to accomplish without these three positions?

ANSWER:

The statutory requirement to review foreign availability for COCOM list review and for new controls must be met. Should the additional three positions not be received, we will have to reduce the number of assessments on present controls by 12 since each of our present analysts can accomplish about 4 assessments per year.

It should be noted that the additional staff will be hired in technical fields not now adequately covered, including biotechnology, electronic instrumentation and machine tools.

QUESTION:

You are requesting an increase of four positions to meet the requirements to achieve in non-COCOM countries the same treatment regarding exports as is practiced by COCOM countries. The resources are associated with completing 20 more such negotiations with COCOM and non-COCOM countries by the end of fiscal year 1987. How many negotiations could you complete without these additional four positions?

ANSWER:

The Office of Technology and Policy Analysis would have to cut back on the level of technical/engineering analysis and support it is supposed to provide to Commerce participants in bilateral negotiations. If the increase is not provided, only two negotiations could be fully supported. With the requested increase Export Administration could fully support twenty negotiations with our COCOM allies and so-called Third Countries.

QUESTION:

You are requesting an increase of $1,000,000 to fund the increase of technical expertise resident within the Federal government. Is this for reimbursement for work performed by other agencies? How necessary is this work? How does this support your overall mission and specifically how does it support the export enforcement activity?

ANSWER:

Given the dynamics of the U.S. economy, there are thousands of commodities and technologies which are introduced annually. In addition, the principal mechanism used to control these products, the Commodity Control List (CCL) is necessarily broad and technically complicated in order to capture only those items of strategic concern. Further the CCL is constantly in a state of revision to keep it current with advancing technology and changing strategic concerns. Given the breadth of technology under control, it is impossible to maintain within ITA resident technical expertise for all issues encompassed by the CCL. What is both possible and, in our view, desirable from a cost effectiveness point of view is to utilize existing technical expertise within the Federal government, but not necessarily just the Commerce Department, to deal with specific export control technical issues as they arise.

The $1,000,000 requested would enable Commerce to tap such expertise from elsewhere within the Federal government. This is considerably less expensive than ITA having to hire such experts as Federal employees who would be available year-round even though we may only require their services for six to eight months.

The outside technical expertise was not intended to directly support enforcement activities. However, export enforcement activities will benefit indirectly from Export Administration's use of outside technical expertise. As in-house engineers begin to have more time available to them, it is expected that they will undertake more liaison activities with enforcement personnel. One such activity is the Strategic Export Analysis Committee (SEAC) which has as its mission the creation of profiles of likely diversions and the use of these profiles to prevent illegal shipments before they happen.

Finally, having such expertise available to ITA, not only to support the CCL List Review process but also to perform commodity classifications, benefits enforcement of export controls. In that phase of export enforcement related to the interdiction of suspect exports, it is critical to enforcement that it have available expertise that can be tapped quickly to determine if an export under surveillance is in fact controlled. This is a technical determination. Further, once a violator has been apprehended and brought to trial, it is necessary that the U.S. Attorney be able to call expert witnesses to support the Government's case against the violator. Again, the arrangement outlined in items a and b enable us to be able to provide such support.

QUESTION:

You are requesting an additional $2,374,000 and 55 positions for Import Administration:

Twenty-seven (27) positions and $1,254,000 is for the Office of Investigations. What type of investigations will be conducted? What is the base level of resources for investigations? Can you conduct your activities in 1987 without this increase and still manage to meet the minimum requirements required by law?

ANSWER:

The Office of Investigations will conduct antidumping/countervailing duty investigations incident to enforcement of the Trade and Tariff Act of 1984. The base level of resources for investigations is $2,557,000 and 63 positions. Due to the significant increase of AD/CVD petitions, the statutory deadlines cannot be met with the necessary degree of quality, without these additional resources. Additionally, the cases have become much more complex because of allegations involving sales below cost of production and use of constructed value for foreign market value.

QUESTION:

Twelve (12) positions and $568,000 is for the Office of Compliance. What is the base level of funding for the Office of Compliance? What level of activity would be associated with continuing in 1987 the 1986 level of resources and not providing for the positions.

ANSWER:

The base level of funding for the Office of Compliance is $3,016,000 and 78 positions. The workload of annual reviews increases on an annual basis as new orders go into effect. Approximately 33% - 35% of all newly initiated petitions will be completed and go to order and thus must have an annual review. The result is an ever increasing workload for the Office of Compliance. The deadline for completion of each review is one year from the time the review is requested. Under the provisions of the Trade and Tariff Act of 1984, reviews are done only on request. Our experience so far indicates that 7 out of 9 cases will require an annual review. If these new resources are not provided, the reviews will not be completed on time and the backlog of Annual Reviews will continue to rise.

QUESTION:

What backlog would be created by continuing the 1986 funding levels?

ANSWER:

Fourteen percent of deadlines in annual reviews will not be made, which will be 28 of a projected 200 reviews. The backlog would increase exponentially for each out year in which funding continued at the FY 86 level.

QUESTION:

Sixteen (16) positions and $552,000 are for the Office of Agreements Compliance. What is the base level of funding for this activity? What level of activity is associated with the increment you have requested?

ANSWER:

The $552,000 is for the sixteen full-time permanent employees. The base level of funding for the Office of Agreements Compliance (OAC) is $1,348,000. The increase is needed to maintain the high level of integrity and scrutiny necessary in monitoring and administering the President's Steel Program.

The level of activity associated with the fund increase reflects the effective handling of the steel program with the expansions that occurred in 1985. OAC's workload now includes export certificates from seventeen arrangement countries and the European Community, as well as an increased number of requests for short supply reviews and international and domestic consultations.

QUESTION:

What would be foregone if the increase were not provided?

ANSWER:

Without the funds necessary for these full-time permanent employees, OAC will be forced to pick and choose which steel trade arrangements to monitor and enforce. It would be impossible for OAC to carry-on its daily functions. OAC's ability to carefully scrutinize all steel entries and strictly monitor all arrangements equally is vital to the success of the President's Steel Program.

QUESTION:

You are requesting a decrease of $1,371,000 and 12 positions related to export promotion services. What will you not be conducting in 1987 that you did conduct in 1986?

ANSWER:

The decrease of $1,371,000 and 12 positions relates to the proposed closing of the Regional Export Development Office (REDO) in Bonn, and the Export Development Offices (EDO) in Sydney and Sao Paulo. Savings from these closings are $1,371,000 plus 12 positions. The trade shows conducted in 1986 by these offices and facilities will continue to be provided from Washington or US&FCS posts in the same cities in 1987.

QUESTION:

Discuss the reduction of $123,000 related to domestic operations.

ANSWER:

As a result of domestic operations reductions, the district offices will effect administrative cost savings as follows:

- Travel and training will be reduced.
- The number of seminars, conferences, and workshops held by District Offices will be reduced.
- Personnel vacancies will remain unfilled.
- Offices will be encouraged to use mail out/mail back letters inviting clients to visit District Offices. Account Executives will be encouraged to increase invitations to clients during telephone inquiries to visit District Offices for further counseling.

QUESTION:

What is the reduction of $391,000 related to Foreign Operations?

ANSWER:

The reduction of $391,000 consists of general belt tightening in the context of streamlining commercial operations abroad. This includes the suspension of contract hires, a "no fill" policy on vacancies of

Foreign Service Nationals, and termination of procurement for commercial libraries. It should be emphasized that there has been no loss of full time American personnel, no involuntary firing of local personnel, and no involuntary closure of posts or consulates.

QUESTION:

Your base level of foreign operations is $36,385,000. Is there any way you can reduce that any further through efficiencies in your program operations?

ANSWER:

The FY 1987 budget submission reduces the base level figure of $36,385,000 for foreign operations by $391,000 because of administrative and program operations efficiencies. In addition the fall in the average exchange rate for the dollar from FY 1985 through FY 1987 will reduce the buying power of our foreign operations by approximately $4 million by FY 1987. This alone will require deferred maintenance, decreased levels of contractual support, reduction of program activities such as travel to put buyers and sellers together, and the cancellation of local language outreach publications. Due to the restriction caused by falling exchange rates, we expect to locate no further program efficiencies.

Overseas Activities

QUESTION:

In what countries do you have foreign commercial services offices, and provide for the record a detailed summary of the number of positions per post and the average cost per post for fiscal years 1985 and 1986.

ANSWER:

A detailed list of overseas staffing by posts within countries within regions and a summary of US&FCS positions overseas by region follows (E = Embassy; CG = Counsulate General; BO = Branch Office):

AFRICA, THE NEAR EAST AND SOUTH ASIA

35 OFFICERS, 91 FSN'S, 4 SECRETARIES

CAMEROON	1 OFFICER, 2 FSN's
YAOUNDE (E)	0 OFFICER, 1 FSN
DOUALA (CG)	1 OFFICER, 1 FSN
IVORY COAST	
ABIDJAN (E)	1 OFFICER, 3 FSN's
KENYA	
NAIROBI (E)	1 OFFICER, 3 FSN's
NIGERIA	6 OFFICERS, 8 FSN's, 1 SECRETARY
LAGOS (E)	5 OFFICERS, 6 FSN's, 1 SECRETARY
KADUNA (CG)	1 OFFICER, 2 FSN's
SOUTH AFRICA	
JOHANNESBURG (CG)	2 OFFICERS, 5 FSN's
ALGERIA	
ALGIERS (E)	2 OFFICERS, 3 FSN's
EGYPT	3 OFFICERS, 10 FSN's
CAIRO (E)	2 OFFICERS, 8 FSN's
ALEXANDRIA (CG)	1 OFFICER, 2 FSN's
INDIA	3 OFFICERS, 16 FSN's, 1 SECRETARY
NEW DELHI (E)	2 OFFICERS, 6 FSN's, 1 SECRETARY
BOMBAY (CG)	1 OFFICER, 5 FSN's
CALCUTTA (CG)	0 OFFICER, 3 FSN's
MADRAS (CG)	0 OFFICER, 2 FSN's
IRAQ	
BAGHDAD (E)	1 OFFICER, 2 FSN's
ISRAEL	
TEL AVIV (E)	1 OFFICER, 6 FSN's

KUWAIT (E)	1 OFFICER, 3 FSN's
MOROCCO	1 OFFICER, 3 FSN's
RABAT (E)	0 OFFICER, 1 FSN
CASABLANCA (CG)	1 OFFICER, 2 FSN
PAKISTAN	1 OFFICER, 6 FSN's
KARACHI (CG)	1 OFFICER, 4 FSN's
LAHORE (CG)	0 OFFICER, 2 FSN's
SAUDI ARABIA	9 OFFICERS, 16 FSN's, SECRETARY
RIYADH (E)	5 OFFICERS, 4 FSN's, 1 SECRETARY
DHAHRAN (CG)	1 OFFICER, 4 FSN's
JEDDAH (CG)	3 OFFICERS, 8 FSN's, 1 SECRETARY
UNITED ARAB EMIRATES	2 OFFICERS, 5 FSN's
ABU DHABI (E)	1 OFFICER, 3 FSN's
DUBAI (BO)	1 OFFICER, 2 FSN's

EAST ASIA AND THE PACIFIC

54 OFFICERS, 94 FSN's, 6 SECRETARIES

AUSTRALIA	7 OFFICERS, 14 FSN's
SYDNEY (CG)	4 OFFICERS, 7 FSN's
BRISBANE (C)	0 OFFICER, 1 FSN
CANBERRA (E)	1 OFFICER, 1 FSN
MELBOURNE (CG)	1 OFFICER, 4 FSN's
PERTH (CG)	1 OFFICER, 1 FSN
CHINA	11 OFFICERS, 0 FSN's, 1 SECRETARY
BEIJING (E)	6 OFFICERS, 0 FSN's, 1 SECRETARY
GUANGZHOU (CG)	2 OFFICERS, 0 FSN's
SHANGHAI (CG)	2 OFFICERS, 0 FSN's
SHENYANG (CG)	1 OFFICER, 0 FSN's
HONG KONG (CG)	4 OFFICERS, 8 FSN's, 1 SECRETARY
INDONESIA	4 OFFICERS, 5 FSN's, 1 SECRETARY
JAKARTA (E)	4 OFFICERS, 5 FSN's, 1 SECRETARY
JAPAN	11 OFFICERS, 32 FSN's, 2 SECRETARIES
TOKYO (E)	9 OFFICERS, 26 FSN's, 2 SECRETARIES
FUKUOKA (C)	0 OFFICER, 1 FSN
OSAKA-KOBE (CG)	2 OFFICER, 4 FSN's
SAPPORO (C)	0 OFFICER, 1 FSN
KOREA	
SEOUL (E)	5 OFFICERS, 7 FSN's, 1 SECRETARY
MALAYSIA	
KUALA LUMPUR (E)	2 OFFICERS, 5 FSN's

NEW ZEALAND	1 OFFICER, 4 FSN's
WELLINGTON (E)	1 OFFICER, 2 FSN's
AUCKLAND (CG)	0 OFFICER, 2 FSN's
PHILIPPINES	
MANILA (E)	3 OFFICERS, 5 FSN's
SINGAPORE	4 OFFICERS, 5 FSN's
THAILAND	
BANGKOK (E)	2 OFFICERS, 9 FSN's

EUROPE

59 OFFICERS, 200 FSN's, 5 SECRETARIES

AUSTRIA	2 OFFICERS, 6 FSN's
VIENNA (E)	2 OFFICERS, 6 FSN's
BELGIUM	2 OFFICERS, 9 FSN's
BRUSSELS (E)	2 OFFICERS, 8 FSN's
ANTWERP (CG)	0 OFFICER, 1 FSN
DENMARK	
COPENHAGEN (E)	1 OFFICER, 4 FSN's
FINLAND	2 OFFICERS, 3 FSN's
HELSINKI (E)	2 OFFICERS, 3 FSN's
FRANCE	6 OFFICERS, 25 FSN's, 1 SECRETARY
PARIS (E)	5 OFFICERS, 20 FSN's, 1 SECRETARY
BORDEAUX (CG)	0 OFFICER, 1 FSN
LYON (CG)	0 OFFICER, 1 FSN
MARSEILLE (CG)	0 OFFICER, 1 FSN
NICE (CG)	0 OFFICER, 1 FSN
STRASBOURG (CG)	0 OFFICER, 1 FSN
O.E.C.D. (PARIS)	1 OFFICER, 0 FSN
GERMANY	12 OFFICERS, 42 FSN's, 1 SECRETARY
BONN (E)	5 OFFICERS, 8 FSN's, 1 SECRETARY
BERLIN (USMISSION)	0 OFFICER, 2 FSN's
DUSSELDORF (CG)	2 OFFICERS, 9 FSN's
FRANKFURT (CG)	1 OFFICER, 6 FSN's
HAMBURG (CG)	1 OFFICER, 5 FSN's
MUNICH (CG)	2 OFFICERS, 4 FSN's
STUTTGART (CG)	1 OFFICER, 5 FSN's
GREECE	3 OFFICERS, 10 FSN's, 1 SECRETARY
ATHENS (E)	3 OFFICERS, 9 FSN's, 1 SECRETARY
THESSALONIKI (CG)	0 OFFICER, 1 FSN
HUNGARY	1 OFFICER, 2 FSN's
BUDAPEST	1 OFFICER, 2 FSN's

ITALY	7 OFFICERS, 23 FSN's
ROME (E)	3 OFFICERS, 9 FSN's
FLORENCE (C)	0 OFFICER, 2 FSN's
GENOA (CG)	0 OFFICER, 1 FSN
MILAN (CG)	4 OFFICERS, 8 FSN's
NAPLES (CG)	0 OFFICER, 1-1/2 FSN's
PALERMO (CG)	0 OFFICER, 1-1/2 FSN's
NETHERLANDS	4 OFFICERS, 14 FSN's, 1 SECRETARY
THE HAGUE (E)	2 OFFICERS, 7 FSN's, 1 SECRETARY
AMSTERDAM (CG)	1 OFFICER, 4 FSN's
ROTTERDAM (CG)	1 OFFICER, 3 FSN's
NORWAY	1 OFFICER, 3 FSN's
OSLO (E)	1 OFFICER, 3 FSN's
POLAND	1 OFFICER, 2 FSN's
WARSAW	1 OFFICER, 2 FSN's
PORTUGAL	1 OFFICER, 5 FSN's
LISBON (E)	1 OFFICER, 4 FSN's
OPORTO (C)	0 OFFICER, 1 FSN
ROMANIA	1 OFFICER, 2 FSN's
BUCHAREST (E)	1 OFFICER, 2 FSN's
SPAIN	4 OFFICERS, 9 FSN's
MADRID (E)	3 OFFICERS, 6 FSN's
BARCELONA (CG)	1 OFFICER, 3 FSN's
SWEDEN	1 OFFICER, 6 FSN's
STOCKHOLM (E)	1 OFFICER, 6 FSN's
SWITZERLAND	2 OFFICERS, 5 FSN's
BERN (E)	2 OFFICERS, 4 FSN's
ZURICH (CG)	0 OFFICER, 1 FSN
TURKEY	2 OFFICERS, 6 FSN's
ANKARA (E)	1 OFFICER, 3 FSN's
ISTANBUL (CG)	1 OFFICER, 3 FSN's
UNITED KINGDOM	4 OFFICERS, 18 FSN's, 1 SECRETARY
LONDON (E)	4 OFFICERS, 18 FSN's, 1 SECRETARY
U.S.S.R.	2 OFFICERS, 0 FSN, 1 SECRETARY
MOSCOW (E)	2 OFFICERS, 0 FSN, 1 SECRETARY
YUGOSLAVIA	1 OFFICER, 6 FSN's
BELGRADE (E)	1 OFFICER, 4 FSN's
ZAGREB (CG)	0 OFFICER, 2 FSN's

THE WESTERN HEMISPHERE

41 OFFICERS, 108 FSN's, 0 SECRETARY

ARGENTINA	2 OFFICERS, 7 FSN's
BUENOS AIRES (E)	2 OFFICERS, 7 FSN's
BARBADOS	1 OFFICER, 1 FSN
BRIDGETOWN (E)	1 OFFICER, 1 FSN
BRAZIL	5 OFFICERS, 22 FSN's
BRASILIA (E)	2 OFFICERS, 3 FSN's
BELEM (CG)	0 OFFICER, 1 FSN
PORTO ALEGRE (C)	0 OFFICER, 1 FSN
RIO DE JANEIRO (CG)	1 OFFICER, 6 FSN's
SAVADOR DA BAHIA (C)	0 OFFICER, 1 FSN
SAO PAULO (CG)	2 OFFICERS, 10 FSN's
CANADA	7 OFFICERS, 8 FSN's
OTTAWA (E)	2 OFFICERS, 2 FSN's
CALGARY (CG)	1 OFFICER, 1 FSN
MONTREAL (CG)	1 OFFICER, 2 FSN's
TORONTO (CG)	2 OFFICERS, 2 FSN's
VANCOUVER (CG)	1 OFFICER, 1 FSN
CHILE	1 OFFICER, 4 FSN's
SANTIAGO (E)	1 OFFICER, 4 FSN's
COLOMBIA	2 OFFICERS, 9 FSN's
BOGOTA (E)	2 OFFICERS, 8 FSN's
CALI (CG)	0 OFFICER, 1 FSN
COSTA RICA	1 OFFICER, 3 FSN's
SAN JOSE (E)	1 OFFICER, 3 FSN's
DOMINICAN REPUBLIC	1 OFFICER, 4 FSN's
SANTO DOMINGO (E)	1 OFFICER, 4 FSN's
ECUADOR	2 OFFICERS, 7 FSN's
QUITO (E)	1 OFFICER, 4 FSN's
GUAYAQUIL (CG)	1 OFFICER, 3 FSN's
GUATEMALA	1 OFFICER, 3 FSN's
GUATEMALA CITY	1 OFFICER, 3 FSN's
HONDURAS	
TEGUCIGALPA (E)	1 OFFICER, 3 FSN's
JAMAICA	1 OFFICER, 2 FSN's
KINGSTON (E)	1 OFFICER, 2 FSN's
MEXICO	9 OFFICERS, 16 FSN's
MEXICO, D.F. (E)	7 OFFICERS, 13 FSN's
GUADALAJARA (CG)	1 OFFICER, 1 FSN
MONTERREY (CG)	1 OFFICER, 2 FSN's

PANAMA	1 OFFICER, 3 FSN's
PANAMA CITY (E)	1 OFFICER, 3 FSN's
PERU	2 OFFICERS, 4 FSN's
LIMA (E)	2 OFFICERS, 4 FSN's
TRINIDAD	0 OFFICERS, 2 FSN's
PORT-OF-SPAIN (E)	0 OFFICERS, 2 FSN's
VENEZUELA	5 OFFICERS, 10 FSN's
CARACAS (E)	5 OFFICERS, 10 FSN's

OVERSEAS "EXPORT PROMOTION SERVICES" POSITIONS IN THE US&FCS

BONN	3 OFFICERS, 3 FSN's
LONDON	0 OFFICER, 2 FSN's
MILAN	0 OFFICER, 2 FSN's
MEXICO, D.F.	1 OFFICER, 2 FSN's
PARIS	0 OFFICER, 2 FSN's
SAO PAULO	0 OFFICER, 2 FSN's
SINGAPORE	1 OFFICER, 2 FSN's
SYDNEY	0 OFFICER, 3 FSN's
TOKYO	1 OFFICER, 2 FSN's
TOTAL "EPS" POSITIONS:	6 OFFICERS, 19 FSN's

SUMMARY OF FCS POSITIONS OVERSEAS

FCS POSITIONS	COUNTRIES	POSTS	OFFICERS	SECY'S	FSN's	TOTAL PERS.
AFRICA, NEAR EAST AND SOUTH ASIA	15	26	35	4	91	130
EAST ASIA AND PACIFIC	11	22	54	6	94	154
EUROPE	21	47	59	5	200	264
WESTERN HEMISPHERE	17	30	41	0	108	149
TOTAL	64	125	189	15	493	697

US&FCS allocates funding to countries, not to posts. The following costs are by country:

Country	Total Cost FY 1985	Operating Budget FY 86
Germany	2,283,844	2,427,606
Japan	2,036,954	2,895,827
Saudi Arabia	1,856,126	1,818,605
France	1,436,110	1,503,090
Australia	1,284,666	1,091,502
United Kingdom	1,257,244	1,305,597
China	1,179,233	1,335,513
Nigeria	1,150,404	965,326
Italy	1,147,706	1,312,312
Brazil	997,771	997,207

Country	Total Cost FY 1985	Operating Budget FY 86
Canada	975,806	962,672
Mexico	837,847	1,026,527
Indonesia	698,962	608,778
Spain	621,027	730,142
Algeria	591,125	534,026
Hong Kong	557,924	574,490
The Netherland	551,626	530,094
India	545,145	554,016
Venezuela	536,771	407,599
Egypt	511,015	436,876
Belgium	501,394	527,459
Korea	499,317	427,289
Switzerland	439,683	476,729
U.A.E.	428,847	636,057
Greece	411,235	346,243
Singapore	407,776	676,973
Thailand	383,654	377,420
Austria	373,758	383,394
Argentina	358,782	338,788
Colombia	322,531	369,665
South Africa	319,399	344,472
Turkey	305,324	324,592
Sweden	300,300	276,565
Philippines	298,988	294,929
Malaysia	297,203	349,157
Ecuador	285,807	282,833
Peru (est)	276,727	268,853
Kuwait	273,603	226,047
Chile	272,069	262,367
Iraq	265,426	122,126
Norway	248,102	206,528
Barbados	243,771	224,990
Pakistan	230,457	207,208
Israel	221,341	276,494
Denmark	211,655	225,515
Finland	203,793	171,838
New Zealand	191,615	152,137
Romania	190,345	150,658
U.S.S.R.	189,507	195,973
Dominican Republic	183,467	165,488
Panama	175,229	189,780
Ivory Coast	170,750	197,187
Morocco	164,081	167,551
Portugal	153,972	175,102
Yugoslavia	152,187	83,770
Kenya	144,241	118,661
Costa Rica	135,384	140,524
Cameroon	134,016	158,132
Guatemala	133,309	118,555
Honduras (est)	128,637	111,068

Country	Total Cost FY 1985	Operating Budget FY 86
Hungary	101,359	86,420
Jamaica	99,054	123,131
Poland	95,330	88,200

#37 (Peru) and #60 (Honduras) are estimated amounts; final FY 1985 reports not yet received from posts.

QUESTIONS FOR THE RECORD BY CONGRESSMAN SMITH

GPO COMMERCIAL PROCUREMENTS FOR PRINTING AND ELECTRONIC PUBLISHING

QUESTION:

We are aware that the Public Printer, at the Government Printing Office, has certain initiatives to encourage Federal agencies to take maximum advantage of GPO commercial procurement contracts. Also, the new GPO electronic publishing procurements are now saving very substantial tax dollars. We would like to know what plans you may have to increase your reliance on GPO commercial procurements for both printing and electronic publishing.

ANSWER:

We will continue to work closely with the Government Printing Office (GPO) in the procurements of both printing and electronic publishing. We presently have 57 contracts with GPO. Whenever new publications series are developed, GPO contracts are utilized. The Department's Office of Publications provides its bureaus with electronic publishing services. We offer developmental/pre-planning assistance for electronic publishing and use GPO's resources for high-volume production.

We are currently studying a proposal for an exemption from Title 44 for the National Technical Information Service (NTIS). This exemption would allow NTIS to compare costs and services available from GPO and other private vendors, and to improve NTIS' ability to offer qualify services to its customers.

Question for the Record by Congressman Early

International Trade Administration

QUESTION:

On March 20, 1986, HR 3128, the Budget Reconciliation Act, which included the authorization for Trade Adjustment Assistance (TAA), was finally agreed to by both the House and Senate. As you know, all Trade Adjustment Assistance Centers (TAACs) were ordered to cease outreach activities and prepare for termination due to lack of an authorization, which expired on December 19, 1985.

Now that HR 3128 has passed and is expected to be signed by the President, what is the status of Trade Adjustment Assistance and the TAACs, particularly in light of the fact that the rescission, will in all likelihood, not be acted upon? When does the Department expect that TAACs will be able to continue their activities and outreach programs?

ANSWER:

As of March 31, 1986 the Budget Reconciliation measure, HR 3128, was not signed by the President.

Reportedly HR 3128 makes significant changes in the TAA program including changing the eligibility criteria and eliminating authority to make and guarantee loans. These changes, and others, require the Office of Trade Adjustment Assistance and the Office of General Counsel to review the provisions of HR 3128 relating to TAA. We may then find it necessary to promulgate guidelines and to develop and publish in the Federal Register new regulations setting forth the Department's responsibilities to implement the reinstated TAA program.

The Department will examine the effects of the retroactive reauthorization legislation on the TAAC agreements scheduled to expire April 30. While resumption of the TAAC system for the provision of TAA services is an option, other approaches are by no means foreclosed. The Department is examining several approaches for providing TAA services on an interim basis as well as for the longer term because of the expiration of the TAAC agreements. Final determinations on how this will be accomplished cannot be made until authorizing sections of HR 3128 are reviewed. Indeed, funding for some TAACs may not be possible as long as the rescission request is in effect.

QUESTION:

What, exactly, was the "technicality" that the Department of Commerce cited that prevented PL 99-180, from providing authorization for trade adjustment assistance as is usually the case with programs and entire departments, such as the Department of Justice, that are unauthorized?

ANSWER:

The authorization for the Trade Adjustment Assistance program for firms was contained in Chapter 3 of Title II of the Trade Act of 1974. Prior to September 30, 1985, Section 285 of the Trade Act provided that Chapter 3 of Title II would terminate on September 30, 1985. The termination date was extended four times by emergency legislation. The fourth extension changed the termination date to December 19, 1985. However, a change in the termination date was not included in a fifth emergency extension act approved on December 23, 1985 or in any other legislation. Therefore, as of December 20, 1985, the authorizing legislation for the Trade Adjustment Assistance program had terminated.

Public Law 99-180, approved on December 13, 1985, does not reauthorize the Trade Adjustment Assistance program either specifically or by implication. The fact that the Congress extended the termination date of the authorizing legislation two times after the approval of Pub. L. 99-180 serves as an explicit recognition by the Congress that the termination date required independent extension in order for the Trade Adjustment Assistance authority to remain in effect. Therefore, the approval of Pub. L. 99-180 alone is not a sufficient basis on which to conclude that the Trade Adjustment Assistance authority has been extended.

QUESTION:

In light of the recent focus and negotiations regarding trade with the Peoples Republic of China, what efforts has the ITA made toward opening markets, particularly in its areas of hi-tech and software, with the Chinese?

ANSWER:

ITA has organized and led Executive Level Trade and Seminar Missions to the Peoples Republic of China in Electronics (March 85), Telecommunications (December 85) and Software and Electronic Components (May 85). The Missions are made up of representatives from U.S. firms who visit key ministry officials, provincial authorities and technical staff. The U.S. participants have face to face exposure and contact with key Chinese decision-makers. Orders and sales have resulted from the earlier Missions and similar positive results are expected for the most recent and future events. Planning is underway to recruit a Mission in FY 87 in the Medical Electronics industry.

ITA has made continuing and concerted efforts to promote technological cooperation between the U.S. and China, and to open the new and relatively untapped China market to U.S. products and services.

In May 1979 the United States and China signed a protocol which established the National Center for Industrial Science and Technology Management (at Dalian). In August 1980 the Center opened. The program is managed by the ITA and the Chinese State Economic Commission, State Science and Technology Commission and

Ministry of Education. Since 1980, the Center has trained senior managers from China's industrial enterprises, government organizations and research institutes in Western management techniques. The result has been an astounding record of advancement and success for the Center's graduates, and a growing nucleus of Chinese managers who are looking to the U.S. for the technical and organizational answers to their development problems.

Beginning in the early 1970's, the U.S. gradually relaxed its controls on high technology sales to the PRC. In May 1983 Secretary Baldrige announced the President's decision to treat China as a "friendly, non-allied" country for export control purposes. Since that time, export licensing procedures have been modified and improved in order to accommodate a dramatic increase in the number of license applications and approvals. U.S. exports of high technology goods such as computers and instruments more than doubled between 1983 and 1985.

In January 1984, President Reagan and Premier Zhao signed the Accord on Industrial and Technological Cooperation (ITCA), which has served as an umbrella agreement for cooperative activities in the electronics and telecommunications, metallurgy, aerospace and industrial renovation areas. Under the ITCA electronics and telecommunications work program, the Department of Commerce and the Chinese Ministry of Foreign Economic Relations and Trade have organized two special trade missions to China. This spring a third China mission is planned and the Commerce Department will also host the U.S. visit of the Chinese Minister of Electronics. These events, and others planned for this year and next, provide U.S. industry with credibility and contacts at the highest levels within the Chinese industrial bureaucracy, as well as helping them to identify specific Chinese interests.

ITA is sponsoring, participating in or supporting the following events with the Peoples Republic of China:

Trade Missions

Aviation and Commercial Aerospace	Beijing Shanghai	10/20-28/85
Columbus Ohio Medical Equipment IOGA	Beijing	11/11-26/86
Executive Level Telecommunications	Beijing X'ian Shanghai	12/7-19/86
Software and Electronic Technical Mission	Beijing Shanghai Chengdu	5/3-16/86
Connecticut SOGA Electronics & Industrial Controls	Jinan Tsingtao	10/6-7/86

Executive Level Telecommunications (Pending)	China	11/1/86
Executive Level Electronics	China	2/1/86
Certified Trade Fairs		
IPCONEX '85 - International Packaging Conference and Exhibition	Beijing	10/22-28/85
ASPAT - Asia Pacific International Trade Fair (general hi-tech)	Beijing	11/15-30/85
MICONEX '86 (analytical & scientific instruments)	Beijing	4/16-22/86
Internepcon China 86 (electronics)	Beijing	4/18-24/86
Expo Comm 86 China (telecommunications)	Beijing	10/16-22/86
Expo Hi-tech 86 (electronics)	Shanghai	10/30-11/6/86
USDOC Organized Fair		
U.S. Aerospace	Beijing	5/15-21/86

QUESTION:

Your justifications reflect an increase of 55 positions for Import Administration programs to meet the growing complexity of investigations and cases with other countries, particularly in negotiating voluntary restraint steel agreements. Please provide more detail about these 55 positions?

ANSWER:

The 55 positions will be utilized as follows: 27 positions for the Office of Investigations, which will consist of 22 analysts to perform antidumping/countervailing investigations and 5 staff accountants to handle the cost of production and constructed value cases which, require specialized accounting skills (these accountants will also work on Compliance cases); 12 positions for the Office of Compliance, which are needed to conduct the increase of annual administrative reviews and the reviews on demand in accordance with the Trade and Tariff Act of 1984; and 16 positions in the Office of Agreements Compliance that monitors and enforces the import of foreign steel covered by the volunteer restraint arrangements with eighteen governments under the President's Steel Program.

QUESTION:

What kind of working relationship does the ITA have with the International Trade Commission or the Office of the U.S. Trade Representative regarding these types of complex investigations?

ANSWER:

ITA works closely with the International Trade Commission on those issues where our separate jurisdictions in the AD/CVD law overlap, such as determining the sufficiency of AD and CVD petitions and defining the scope of investigations. Together with the Office of the U.S. Trade Representative (USTR) ITA divides responsibility for the steel arrangements; USTR has primary responsibility for negotiating the voluntary restraints, while ITA administers them. ITA also works closely with USTR in any AD and CVD investigations where suspension agreements are proposed. Finally, ITA provides technical expertise on our administration of the AD and CVD laws to USTR in connection with the GATT Antidumping and Subsidies Codes and in negotiations with countries seeking to obtain an injury test under the CVD law.

QUESTION:

I understand that the ITC's responsibilities have also greatly increased in investigative and litigative areas involving imports, yet their budget request does not reflect any additional positions. Did ITA or the Department originally request these 55 additional positions of OMB? Would granting these additional positions have any effect or impact on the workload of the ITC or USTR? If so, please explain how?

ANSWER:

Although the Department forwarded the request for 55 additional positions to OMB, ITA originally submitted the proposal to the Department.

An increase in the ITA staff would lead to an increase in the workload of the ITC and USTR only if ITA were to increase the number of self-initiated AD and CVD cases. A greater number of cases leads to more injury investigations by the ITC, and a greater possibility of negotiating to settle the cases involving USTR.

The change in the AD/CVD laws last year by Congress requires the ITC to cumulate investigations for injury purposes, and has had a dramatic effect on case filings. Most cases involving the injury test are now filed against the same product from several countries. This will not add exponentially to the ITC's workload because it examines primarily the U.S. industry. Since Commerce must examine each product from each country in a separate investigation, its workload has increased much more than the ITC's.

Question for the Record by Congressman Rogers

International Trade Administration

QUESTION:

Please outline your efforts planned for the current year to promote coal exports.

ANSWER:

The Office of Energy in Trade Development has an active coal export promotion program based on bilateral discussions, generic industry promotion activities, and company specific export assistance and counseling. All three areas will be pursued in 1986.

Bilateral discussions, in cooperation with other federal agencies, are designed to assist U.S. exporters in marketing coal to state owned or controlled enterprises. Government to government discussions are now underway with Japan, Republic of Korea and Italy.

Generic industry promotion activities have three main thrusts. The first is to organize and coordinate the direct and indirect assistance that the Foreign Commercial Service offices, located in the various embassies around the world, can offer to the U.S. coal exporting industry. The second is aimed at developing specialized financial and technical programs to capitalize on the unique quality characteristics of U.S. coal. This effort often requires interagency support. The third is the promotion of export trading companies as an innovative way to expand existing markets and to create new markets. Each of these efforts are activated whenever market opportunities arise.

Specific export assistance and counseling services are provided to U.S. companies upon request. The nature of the assistance provided will vary depending on the problems encountered and the importing country involved.

QUESTION:

It is projected that during 1986, U.S. coal exporters will lose sales in Denmark, Finland, Sweden and Japan primarily as a result of increased sales by Australia and Colombia. Please list all actions taken by ITA (including Foreign Commercial Service personnel) to promote coal exports in these important markets.

ANSWER:

The main reasons for the potential loss in 1986 U.S. coal exports to the countries listed are varied. For example, decisions by foreign buyers to add a new source of supply, such as Colombia, which can undercut the world price, is based on diversification of supply issues. Japan's increase in Australian coal purchases is tied into the new project mines coming on line. Therefore, appropriate ITA activities to promote U.S. coal depends on the country and the market conditions.

For Japan, the principal effort is within the U.S.-Japan Energy Working Group. For Denmark, Finland, and Sweden the principal efforts are working with individual U.S. coal exporters to support their marketing plans. ITA's activities depend heavily on our foreign commercial officers who intercede directly with host government officials to promote the use of U.S. coal. Each action taken is dependent upon the particular situation.

QUESTION:

Please list the number of trade shows (for all products) which Commerce participated in or sponsored during FY85 and your plans for FY 1986. How many trade shows for coal did Commerce participate in?

ANSWER:

During FY 1985, Commerce participated in or sponsored 77 trade shows or fairs, 20 catalog/video catalog shows and had a presence in 3 Business Information Offices (BIO) at major overseas shows. In addition, ITA supported 26 trade and seminar missions, 17 overseas certified events, and 35 State- or Industry-Organized-Government-Approved (S/IOGA) trade missions which included substantive operational support overseas.

In FY 1986, 90 trade shows are planned along with 42 trade and seminar missions, 21 catalog and video catalog shows and 6 BIOs at major trade shows. ITA also plans to increase support to privately-sponsored or organized events: overseas certified events (25), S/IOGAs (55), and Foreign Buyer Program events (5).

There were no trade shows for coal in FY's 1985 or 1986.

QUESTION:

For several years, the report accompanying the Commerce Appropriation bill has included instructions for Commerce to "utilize every available opportunity to negotiate with the Japanese with respect to maintaining and increasing the U.S. share of the Japanese coal market." Please list all specific actions, including instructions to your Foreign Commercial Service personnel, taken to carry out these instructions.

ANSWER:

Significant actions taken in the past two fiscal years to carry out the Committee's request are listed.

March 1986	Energy Working Group meets in Tokyo as part of the bilateral Economic Subcabinet review meeting. Under Secretary Bruce Smart leads coal discussions and review of the November 1983 Reagan/Nakasone Energy Cooperation Agreement.
January 1986	International Energy Agency, Standing Technical Committee review of Japanese energy situation.

December 1985	Secretary of Commerce sends a letter to MITI Minister noting the successful completion of the prefeasibility study of a project mine in the Alaskan Beluga coal field and urges Japan to move forward with a commercial agreement.
October 1985	Secretary of Commerce sends a letter to MITI Minister urging the Japanese to go forward on the construction of a model 2000 megawatt power plant designed to burn Western U.S. subbituminous coal.
September 1985	Energy Working Group meets to review implementation of the Agreement.
September 1985	Energy Experts Group meet and a thorough review of past and projected coal trade with Japan is made.
August 1985	Secretary of Commerce sends a letter to MITI Minister urging the Japanese to proceed with a commitment to build a model power plant to burn Western U.S. subbituminous coal.
July 1985	International Energy Agency, Standing Long Term committee review of Japanese energy situation.
March 1985	Energy Working Group meeting is held and the U.S. side makes an in-depth review and assessment of coal trade with Japan.
February 1985	Energy Experts Group meet and the focal point of the meeting is the decline in U.S. coal exports to Japan. The Japanese are urged to take corrective actions consistent with the provisions in the Reagan/Nakasone energy agreement.

QUESTION:

Please list all letters or other written material sent by the Department to promote the export of Alaskan coal to Japan. Please list the letters or other written materials sent to Japan to promote the export of continental U.S. coal.

ANSWER:

The following reports and letters were sent to Japanese government officials promoting all U.S. coal producing regions in the United States:

- Technical Paper on the U.S. Coal Industry for the U.S.-Japan Energy Working Group, U.S. Department of Commerce, International Trade Administration, July 1983.
- Report on Potential for Cost Reductions in Inland Transportation of U.S. Coal Exports, U.S. Department of Commerce, International Trade Administration and the Department of Energy, August 1983.

- o Recent Developments in U.S. Coal Exporting Capability, U.S. Department of Commerce, International Trade Administration, and Department of Energy, February, 1984.
- o Letter from Secretary of Commerce to Japanese Minister of International Trade and Industry, September, 1984.
- o Letter from Secretary of Commerce to Japanese Minister of International Trade and Industry, August, 1985.
- o Letter from Secretary of Commerce to Japanese Minister of International Trade and Industry, October, 1985.

The following letter was sent to Japan specifically promoting the Japanese import of Alaskan coal:

- o Letter from Secretary of Commerce to Japanese Minister of International Trade and Industry, December, 1985.

QUESTION:

The Committee report specifically asked the Commerce Department to report back regularly on the progress of the U.S.-Japan Energy Working Group and for these reports to contain details on the current coal trade situation with Japan. Please list the dates of all these reports.

ANSWER:

The first meeting of the U.S.-Japan Energy Working Group held in FY86 was in Tokyo on March 1. A report on this meeting is in preparation and should be submitted to the Committee in April.

QUESTION:

What are your specific plans for 1986 and 1987 to promote coal exports to Japan?

ANSWER:

The main efforts to promote coal exports to Japan will be to achieve full implementation of the Reagan/Nakasone energy cooperation agreement. A Japanese commitment to fulfill the provisions in this agreement can lead to an immediate arrest in the decline of U.S. coal exports to Japan and then a gradual increase as Japanese import demand increases.

QUESTION:

What staff resources are assigned to textile program operations related to the activities of the Committee for the Implementation of Textile Agreement (CITA)? The activities to be included in the response should include analysis of market conditions in support of recommendations for import controls and review of trade data to support bilateral negotiations.

ANSWER:

In the Department of Commerce's Office of Textiles and Apparel, a total of 33 staff are assigned primarily to responsibilities related to CITA activities. These include staff assigned to the Industry Assessment Division (10 people), which is primarily responsible for analyzing domestic market conditions, and staff assigned to the International Agreements and Monitoring Division (19 people), which is responsible for monitoring imports generally and under our bilateral agreements. Other staff (4) are in the office of the Deputy Assistant Secretary. Other agencies, such as the Office of the U.S. Trade Representative and the Department of State, also have staff members specifically assigned to support those agencies' responsibilities as CITA members.

QUESTION:

List the reports and analysis prepared by Commerce staff in support of its official responsibilities relating to CITA. Include and identify separately, reports prepared on Commerce initiative, reports or supplements prepared in response to requests from other agencies or as a result of CITA request, reports prepared at the request of the White House.

ANSWER:

All of the following reports are or have been prepared by Commerce on its own initiative:

A. Published Reports

Current Situation Reports (monthly) -- Includes employment, production indices, producer and consumer prices, sales, inventories, profits, capacity utilization, shipments, imports, exports, consumption and the trade deficit.

Market Summary Reports -- analyses of impact of imports in specific categories from specific countries.

Market Statements -- official document presented to foreign government when a call is made. Market statement describes the extent of market disruption and the particular country's contribution to the disruption. Draft market statements are prepared for CITA on demand.

U.S. Production, Imports and Import/Production Ratios For Cotton, Wool and Man-Made Fiber Textiles and Apparel -- annual publication, provides information on import penetration of cotton, wool, and man-made fiber textile and apparel products by textile category for 1972 through 1984.

Performance Report - monthly
(Imports charged against limits, by Country and Category)

Major Shippers Report - monthly
(General Imports by Category, Part-Category and Country)

807 Major Shippers Report - monthly
(807 General Imports by Category and Country)

Correlations - annually and supplements when necessary
TSUSA's and descriptions of the items that comprise the US category system used for implementing the textile import program.

Three Fiber Spread - monthly
Total general imports by product type (yarn, fabric and apparel) and fiber (cotton, wool and man-made fiber).

Press Release - monthly
Total general imports in quantity and value of cotton, wool, and man-made fiber Textiles and Apparel by fiber, major category grouping, and major country grouping, with trade balances.

Import Analysis - monthly
General import trade trends for World, top 10 and major country groupings, quantity and value, for cotton, wool and man-made fiber.

TQ 2010 U.S. General Imports of Cotton Manufactures - monthly
General Imports of cotton manufactures in quantity by Category, TSUSA and Country

TQ 2210 U.S. General Imports of Wool Manufactures - monthly
General Imports of wool manufactures in quantity by Category, TSUSA and Country

TQ 2310 U.S. General Imports of Man-Made Fiber Manufactures - monthly
General Imports of man-made fiber manufactures in quantity by Category, TSUSA and Country

TQ 2495 U.S. General Imports of Cotton, Wool and Man-Made Fiber Manufactures - monthly
General Imports in quantity by Country, Category and Month of export

TQ 2510 U.S. General Imports of Textile Manufactures other than Cotton, Wool and Man-Made Fiber - bi-annually
General Imports of other fiber manufactures in quantity by Category, Tsusa and Country

TQ 2496 - General imports of Cotton, Wool and Man-Made Fiber - Subgroup by Country. In value and quantity

TQ 2196 - U.S. exports of Cotton, Wool and Man-Made Fiber Subgroup by Country, In value.

TQ 2730 U.S. General Imports of Cotton Manufactures
General Imports of cotton manufactures in value by Category TSUSA and Country

T.Q. 2740 U.S. General Imports of Wool Manufactures
General Imports of Wool manufactures in value by Category TSUSA and Country

TQ 2760 U.S. General Imports of Man-Made Fiber Manufactures
General Imports of Man-Made Fiber Manufactures in value by Category, TSUSA and Country

Summary of Agreements - Three times yearly
Limits, growth rates and flexibility provisions by category for each country

List of calls for current year
by country and category

List of embargoed categories
by country and category

List of categories subject to staged entry
by country and category

B. Other OTEXA generated General Imports Reports - not published

Value Major Shippers Report - run monthly, not published
(Value General Imports by Category and Country)

Global Report - monthly
Total General Imports by Country and Category

Call Selection Report - monthly
Categories meeting White House additional criteria of December 1983 for assumed market disruption for CITA decision to call

Flash Report - monthly
Total general imports of cotton, wool and man-made fiber Textiles and Apparel.

Early Warning Report - monthly
Identifies categories under limits that are filling at rates which may cause overshipments.

"E" Reports - weekly
Export licenses issued by Hong Kong, Korea, and Taiwan for categories not under limit, by country

US Imports 1980 through 1985 - ad hoc
by Total, Apparel, Non-Apparel and Supplier Type

Reports prepared at the request of Congress, the White House, or other branch of Government:

Overview of the Current Situation of the Textile Industry
Prepared by the White House Interagency Working Group on Textiles and Apparel, Walter C. Lenahan, Chairman, presented to the Cabinet Council on Commerce and Trade (CCCT) on 7/28/83, revised October 1983. Report was updated on 9/6/84 for the Vice-President.

Testimony of Walter C. Lenahan, Deputy Assistant Secretary for Textile and Apparel, International Trade Administration, U.S. Department of Commerce before the Subcommittee on Trade of the Committee on Ways and Means, Honorable Sam M. Gibbons, Chairman, April 3, 1985.

Testimony of Walter C. Lenahan, Deputy Assistant Secretary for Textiles and Apparel, International Trade Administration, U.S. Department of Commerce before the Subcommittee on Commerce, Consumer and Monetary Affairs of the Committee on Government Operations, Honorable Doug Barnard, Jr., Chairman, March 6, 1985.

Current Status and Trends in the U.S. Textile and Apparel Industries
Prepared for the MFA Task Force, Charles R. Carlisle, Chairman, August 1985.

In addition, Commerce staff also participated in the preparation of the February 17, 1986 Report by Secretary Baker on overshipments, a report prepared at the request of the White House.

QUESTION:

How many market disruption situations were brought by Commerce to the CITA in each of the last three years. List by category and by country and provide the data of each proposal from Commerce to CITA. With respect to each category, and each request, please also state whether the category and country involved were subject to a bilateral agreement or were under Article 3 of the MFA or otherwise.

ANSWER:

The CITA deliberation process, including the number of recommendations made by the Commerce Department for calls on particular categories and countries, is confidential. The inter-agency deliberative process could be seriously impaired if there were public disclosure of the calls considered but not made by CITA. Consideration by CITA as to whether to request consultations with a foreign government is a "foreign affairs function," which is specifically exempted from public disclosure under the Freedom of Information Act and the Administrative Procedure Act, 5 U.S.C. sections 552 and 553. The purpose of the foreign affairs function exemption is to allow more cautious and sensitive consideration of those matters which substantially affect relations with other governments. See American Association of Exporters and Importers v. United States, 751 F.2d 1239, 1249 (Fed. Cir. 1985).

QUESTION:

How many of these action were accepted by the CITA on the basis of initial staff work done at Commerce and how many required further analysis, data preparation or other follow-up as a result of CITA review of the Commerce proposal?

ANSWER:

Most votes by CITA agencies on a Commerce recommendation are made on the basis of initial staff work done at Commerce. However, we estimate that, of the approximately 400 calls CITA made upon the recommendations by Comerce during the 1983 to March 1986 period, approximately 15 of these recommendations required further staff work by Commerce at the specific request of CITA before CITA agencies voted on the calls. In those instances, votes were deferred until the additional information was communicated to CITA.

QUESTION:

What resources were expanded on subsequent analysis, revision or research following the initial CITA review of those situations in which the initial Commerce recommendation was not accepted by the CITA?

ANSWER:

In each instance in which a CITA agency deferred voting on a Commerce recommendation pending a request for additional analysis, revision, or research, Commerce was able to provide that information with an average expenditure of about one hour per request.

QUESTION:

For each of the different market disruption situations brought by Commerce, please submit the following information:

What was the level of general imports during the 12 months ending on the month prior to the request?

ANSWER:

For the confidentiality reasons cited previously, the Department cannot state when it first recommended a call to CITA or provide the level of general imports during the one year period preceding that initial recommendation.

QUESTION:

What was the level of general imports during the MFA or bilateral formula period applicable?

ANSWER:

The attached chart contains the requested information.

QUESTION:

What was the minimum permissible level for controls under the bilateral agreement (or other agreement) at the time the issue was presented to CITA?

ANSWER:

The attached chart contains the requested information.

QUESTION:

What was the date on which CITA agreed to a consultation request? "What was the number of CITA meetings at which this request was discussed prior to adoption by CITA?

ANSWER:

The answer to the first part of this question is contained in the attached chart. For the confidentiality reasons cited previously, the Department cannot reveal the number of CITA meetings at which a particular recommendation for a call was discussed.

QUESTION:

What was the date of the consultation request transmitted to the foreign government?

ANSWER:

The attached chart contains the requested information.

QUESTION:

What was the date of notice of consultations published in the Federal Register?

ANSWER:

The attached chart contains the requested information.

QUESTION:

What was the level of imports entering the US which were exported after CITA was presented with the issue and before consultations were requested?

ANSWER:

For the confidentiality reasons cited previously, the Department cannot reveal the quantity of merchandise which was exported after CITA was first presented with the issue and before consultations were requested.

QUESTION:

What was the date of import controls established on the category?

ANSWER:

The attached chart contains the requested information.

QUESTION:

What was the level of final settlement on each category by country?

ANSWER:

The attached chart contains the requested information.

QUESTION:

What was the minimum level legally available to the US under the bilateral on the basis of request for consultations and trade at the time the consultations were requested?"

ANSWER:

The attached chart contains the requested information.

QUESTION:

List the CITA meetings involved during each of the last 3 calendar years concerning these category consultation requests, indicating also how many agency representatives attended each meeting and the approximate duration of each meeting.

ANSWER:

Below is a list of the CITA meetings since 1983. Meetings last an average of one to two hours.

CITA MEETING	NUMBER OF AGENCY REPS
* 4/12/83	5
* 5/17/83	5
6/17/83	4 (Treasury)
8/16/83	5
* 10/4/83	5
11/4/83	5
11/21/83	4 (Treasury)
12/23/83	5
1/16/84	5
2/14/84	5
3/12/84	5
4/2/84	5
4/13/84	5

CITA MEETING	NUMBER OF AGENCY REPS
* 4/26/84	5
* 5/8/84	5
5/15/84	5
6/15/84	5
7/23/84	5
* 8/14/84	5
8/21/84	5
9/24/84	5
10/24/84	5
* 11/6/84	5
11/16/84	5
* 12/4/84	5
12/20/84	4 (Labor)
* 1/4/85	5
1/22/85	5
2/22/85	5
* 3/14/85	5
3/19/85	5
* 4/8/85	5
4/22/85	5
5/15/85	5
* 6/6/85	5
6/20/85	5
* 6/28/85	5
7/16/85	5
8/12/85	5
9/13/85	5
10/22/85	4 (Labor)
11/20/85	5
12/12/85	5

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* Not call meetings.
Absent agency noted in parentheses.

FINAL 1985 CALLS

Cat., Description		Type of Call	Call Level (SYE)	Date of Call	Fed Reg Notice	Date of Import Control	Imposed Limit or Agreed Limits
Bangladesh:							
334	Other Cotton Coats, MB	Art 3	1,283,108	JANUARY 29, 1985	FEBRUARY 26, 1985	APRIL 19, 1985	2,277,000
335	Cotton Coats, WGI	Art 3	3,469,613	JULY 29, 1985	N/A	FEBRUARY 26, 1986	4,543,000
340	Cotton Non-Knit Shirts, MB	Art 3	5,088,264	FEBRUARY 28, 1985	MARCH 21, 1985	JULY 18, 1985	7,920,000
347/348	Cotton Trousers, MB	Art 3	10,947,783	JULY 29, 1985	N/A	FEBRUARY 26, 1986	17,622,000
640	M-MF Non-Knit Shirts, MB	Art 3	5,701,656	SEPTEMBER 30, 1985	N/A	FEBRUARY 26, 1986	31,200,000
Brazil:							
315	Cotton Printcloth	Art 3	11,475,558	APRIL 1, 1985	MARCH 27, 1985	N/A	13,500,000
317-S	Cotton Sateen Fabric Only	Art 3	7,324,755	APRIL 1, 1985	MARCH 27, 1985	N/A	12,250,000
335	Cotton Coats, WGI	Art 3	870,439	MAY 30, 1985	JUNE 13, 1985	OCTOBER 15, 1985	2,808,400
337	Cotton Playsuits	Art 3	1,485,825	MAY 13, 1985	MAY 30, 1985	OCTOBER 15, 1985	2,450,000
338/339	Cotton Knit Shirts/Blouses	Art 3	3,197,362	APRIL 1, 1985	MARCH 27, 1985	N/A	3,780,000
350	Cotton Dressing Gowns	Art 3	2,608,650	APRIL 1, 1985	MARCH 27, 1985	N/A	3,060,000
361	Cotton Sheets	Art 3	1,884,608	APRIL 1, 1985	MARCH 27, 1985	N/A	2,790,000
363	Cotton Terry & Other Pile Towels	Art 3	6,124,680	APRIL 1, 1985	MARCH 27, 1985	N/A	6,750,000
604-A	Acrylic Spun Yarn Only	Art 3	1,542,531	APRIL 1, 1985	MARCH 27, 1985	N/A	1,845,000
648	M-MF Trousers, WGI	Art 3	3,382,730	MAY 30, 1985	JUNE 13, 1985	N/A	8,010,000
China:							
359/659-D	Cut & Sewn Headwear	CM	20,418,025	SEPTEMBER 30, 1985	N/A	-	-
359-I	Infant Sets Only	CM	5,118,567	MARCH 29, 1985	APRIL 19, 1985	APRIL 19, 1985	5,118,567
359-V	Vests Only	CM	4,045,304	JANUARY 30, 1985	FEBRUARY 27, 1985	JANUARY 22, 1986	6,210,000
360	Cotton Pillowcases	CM	2,488,608	NOVEMBER 29, 1985	DECEMBER 26, 1985	-	-
361	Cotton Sheets	CM	15,308,370	SEPTEMBER 3, 1985	N/A	OCTOBER 4, 1985	17,980,000
369-L	Luggage Only	CM	15,273,472	AUGUST 15, 1985	SEPTEMBER 17, 1985	SEPTEMBER 23, 1985	17,020,000
605-T	Threads over 90 cents	CM	868,410	AUGUST 15, 1985	SEPTEMBER 17, 1985	SEPTEMBER 23, 1985	1,575,000
651	M-MF Nightwear	CM	16,871,348	AUGUST 15, 1985	SEPTEMBER 17, 1985	SEPTEMBER 23, 1985	25,875,616
652	M-MF Underwear	CM	19,769,744	MAY 30, 1985	JUNE 18, 1985	JUNE 18, 1985	27,692,304

Cat., Description		Type of Call	Call Level (SYE)	Date of Call	Fed Reg Notice	Date of Import Control	Imposed Limit or Agreed Limits
659-I	Infant Sets Only	CM	7,815,452	DECEMBER 27, 1985	JANUARY 28, 1985	JANUARY 28, 1985	N/A
670-L	Luggage Only	ART 3	24,085,610	SEPTEMBER 3, 1985	OCTOBER 3, 1985	DECEMBER 26, 1985	24,085,610
Guatemala:							
310/318	Cotton Gingham and Other Yarn-dyed Cotton Fabric	ART 3	4,938,429	JANUARY 11, 1985	JANUARY 28, 1985	DECEMBER 9, 1985	5,050,000
Hong Kong:							
360	Cotton Pillowcases	E	1,100,700	AUGUST 29, 1985	SEPTEMBER 16, 1985	-	EXPIRED
440	Wool Non-knit Shirts & Blouses	E	316,032	AUGUST 7, 1985	SEPTEMBER 14, 1985	-	DROPPED
637	M-MF Playsuits	E	3,024,749	AUGUST 1, 1985	AUGUST 14, 1985	-	3,024,749
670-L	Luggage	ART 3	12,852,238	SEPTEMBER 27, 1985	OCTOBER 25, 1985	-	-
India:							
313	Cotton Sheeting	CM	11,517,319	JANUARY 30, 1985	N/A	MARCH 5, 1985	11,517,319
315	Cotton Printcloth	CM	5,687,641	OCTOBER 31, 1985	N/A	FEBRUARY 14, 1985	5,687,641
Indonesia:							
336	Cotton Dresses	CM	1,596,055	MAY 31, 1985	JUNE 18, 1985	NOVEMBER 6, 1985	3,091,725
337	Cotton Playsuits	CM	1,245,125	MAY 31, 1985	JUNE 18, 1985	NOVEMBER 6, 1985	1,875,000
613-C	L/W Non-Cellu/Cot Spun Yarn Fabric	CM	4,981,714	JANUARY 31, 1985	MARCH 15, 1985	NOVEMBER 6, 1985	15,000,000
614-F	Spun filament combination	CM	3,418,463	MARCH 29, 1985	APRIL 9, 1985	NOVEMBER 6, 1985	15,000,000
645/646	M-MF Sweaters,	CM	7,082,970	APRIL 30, 1985	MAY 10, 1985	NOVEMBER 6, 1985	6,256,000
648	M-MF Trousers, WGI	CM	15,927,511	FEBRUARY 28, 1985	MARCH 22, 1985	NOVEMBER 6, 1985	22,428,000
Israel:							
361	Cotton Sheets	ART 3	3,884,021	MARCH 29, 1985	APRIL 13, 1985	NOVEMBER 13, 1985	4,650,000

FRIDAY, MARCH 21, 1986.

MINORITY BUSINESS DEVELOPMENT

WITNESSES

JAMES H. RICHARDSON GONZALES, DIRECTOR, MINORITY BUSINESS DEVELOPMENT AGENCY

HAROLYN STRONG, BUDGET OFFICER

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. Next we have the Minority Business Development Agency. Mr. Gonzales, please highlight your statement.

Mr. GONZALES. Yes, sir. Accompanying me is my budget officer, Ms. Harolyn Strong.

Our budget request for fiscal year 1987 is $45,369,000. This is an increase of $369,000 from the appropriation level for 1986, and is to offset non-discretionary cost increases.

The administration has proposed to consolidate the Small Business Administration's [SBA) minority procurement assistance program at MBDA. Our request does not include resources for this proposal. A budget amendment will be proposed for this transfer following enactment of enabling legislation.

ACCOMPLISHMENTS

Our accomplishments throughout the year have been in the form of activities which we believe have furthered the advocacy role for minority business in this country. Starting with the Presidential proclamation for the Minority Enterprise Development Week, we worked last year, as we have done in previous years, with the Small Business Administration and other Federal agencies to develop a program to honor the significant achievements of minority business contributions in this country.

We are proud to say that we had over 750 registered participants, minority businesses. We had 70 Fortune 500 corporate entities, 24 Federal agencies and additional trade associations in celebrating the accomplishments of minority businesses.

In July 1983, the President issued Executive Order 12432 requiring Federal agencies to develop comprehensive minority business development plans and to implement objectives which he had set forth in December 1982.

President Reagan, at that time, set three-year goals for fiscal year 1983, 1984 and 1985 of $15 billion in procurement, $1.5 billion in credit assistance, and $6- to $7 billion in procurement under grants.

I am pleased to report the performance reported by the Federal agencies depicts substantial achievement of the President's minority business objectives. Although final 1985 Federal agency performance data is not yet available, all indications are that the Presidential goals have been exceeded.

In our budget for 1987, we are going to continue activities at the 1986 funding level. Our Enterprise Development Program in 1987, I will continue pursuing the goal of encouraging the creation and expansion of minority businesses through minority business development centers, which identify and develop opportunities within the public and private sectors.

Our research and development program activities will continue at the fiscal year 1986 level. In fiscal year 1987, the objective of this program is to stimulate public and private sector activities in order to increase minority business participation in the widest possible range of business sectors.

We will also fund, under this program, minority business, industry and trade associations and Chambers of Commerce to conduct activities designed to strengthen minority businesses for specific industries.

In our advocacy research and information program, we did not propose any new budget changes. We will continue our efforts to increase advocacy activities through MBDC's network and at the state and local level.

We will continue to conduct and fund research for minority business and to manage the assorted information systems used by our minority business development centers.

I cannot, Mr. Chairman, stress enough the importance of information dissemination for the minority business community. The nation's economy has moved to an information base. In this environment, it is incumbent upon us, being the only agency doing minority business activities, to be able to provide the kind of information needed by minority business firms and those seeking to do business with them.

Mr. Chairman, this concludes my statement. I will be glad to answer any questions.

[The statement of Mr. Gonzales and the justifications follow:]

DEPARTMENT OF COMMERCE
STATEMENT BY THE DIRECTOR OF
THE MINORITY BUSINESS DEVELOPMENT AGENCY
JAMES H. RICHARDSON GONZALES
BEFORE THE HOUSE APPROPRIATIONS COMMITTEE,
SUBCOMMITTEE ON COMMERCE, JUSTICE, STATE, THE JUDICIARY,
AND RELATED AGENCIES
March 21, 1986

Mr. Chairman and Members of the Committee:

Thank you for the opportunity to present the FY 1987 Appropriation Request for the Minority Business Development Agency (MBDA). Accompanying me today is my Budget Officer, Harolyn Strong.

Summary of Budget Request

MBDA's budget request for FY 1987 is $45,369,000. This is an increase of $369,000 from the appropriation level for 1986 and is to offset non-discretionary cost increases. The Administration has proposed to consolidate the Small Business Administration's (SBA) minority procurement assistance program at MBDA. Our request does not include resources for this proposal. A budget amendment will be proposed for this transfer following enactment of enabling legislation. ① Before discussing the budget we are proposing for fiscal year 1987, I would like to highlight some of our recent successes.

Accomplishments

President Reagan has designated the first full week of October as Minority Enterprise Development Week (MED Week). Last year, MBDA worked with SBA and other Federal agencies to develop a program to honor the significant achievements of minority business men and women. At the National celebration of MED Week

1985, last fall, more than 750 registered participants joined representatives from 70 Fortune 500 corporations, 24 Federal agencies, trade associations, and other businesses in celebrating accomplishments in business by minorities and in broadening opportunities for all minority entrepreneurs.

The central focus of last year's event was the marketplace where participants learned how to do business with corporate America and the Federal Government. Seminars and other networking activities were offered to give minority entrepreneurs relevant information and help in developing resources. At the Corporate Awards Breakfast, awards were presented to major corporations that, in 1985, led in support to minority enterprise. The highlight of the week's events was a White House ceremony where the Vice President presented awards to the top minority entrepreneurs.

On July 14, 1983, the President issued Executive Order 12432 requiring Federal agencies to develop comprehensive minority business development plans and to implement these objectives which he set forth on December 17, 1982. The Secretary of Commerce is responsible for coordinating the total Federal effort and MBDA has dedicated a significant level of effort to implement all activities associated with the planning, organization, coordination, and monitoring of Federal compliance with President's Reagan's statement and Executive Order 12432. For example, President Reagan set three year goals (FY 1983, 1984, and 1985) of $15 billion in procurement; $1.5 billion in credit assistance; and $6-7 billion in procurements under grants.

I am very pleased to report that performance reported by Federal agencies depicts substantive achievement of the President's minority business objectives. Although final FY 1985 Federal Agency Performance data is not yet available, all indications are that the Presidential goals have been exceeded. Preliminary results for 1985 indicate minority firms received over $6.3 billion in Federal procurements; over $833 million in credit assistance (loans, loan guarantees, and surety bond guarantees); and over $2.3 billion in procurements made by Federal grant and cooperative agreement recipients. Of this amount, MBDA's funded organizations have reported $43.7 million in Federal procurements and $99.2 million in credit assistance. When non-Federal sources are added, MBDA's overall performance is substantially higher.

Based on the figures, the three year goals have reached 113% for Federal procurements, 158% for credit assistance goal, and 100% for grants and cooperative agreements.

I am here today to present the budget request for those activities currently performed by MBDA. Our budget continues all activities in 1987 at the 1986 funding level.

Enterprise Development Program

In 1987, we will continue pursuing the goal of encouraging the creation and expansion of minority businesses through Minority Business Development Centers (MBDCs) which identify and develop opportunities within the public and private sectors. In 1986, we are emphasizing qualitative over quantitative performance measures to evaluate the operations of MBDCs. We have developed new project monitoring techniques now being used by our regional staff. These qualitative factors include, but are not limited to, management, relationships with local, state, and Federal resources, and client satisfaction. These improvements were instituted to result in better quality service to minority businesses.

Resource Development Program

The Resource Development activities will continue at the FY 1986 level in FY 1987. Our objectives are to stimulate public and private sector activities in order to increase minority business participation in the widest possible range of business sectors. For example, we are helping 33 state and local governments

Cat., Description		Type of Call	Call Level (SYE)	Date of Call	Fed Reg Notice	Date of Import Control	Imposed Limit or Agreed Limits
Japan:							
310/318	Cotton Gingham and Other Yarn-Dyed Fabric	CM	18,422,889	AUGUST 29, 1985	SEPTEMBER 23, 1985	-	18,422,889
313	Cotton Sheeting	CM	5,966,740	JULY 29, 1985	AUGUST 17, 1985	-	6,400,000
340	Cotton Non-knit Shirts, MB	CM	2,293,248	JULY 29, 1985	SEPTEMBER 17, 1985	-	2,376,000
350	Cotton Dressing Gowns	CM	862,869	JUNE 27, 1985	JULY 15, 1985	-	1,020,000
646	M-MF Sweaters, WGI	CM	5,511,794	AUGUST 29, 1985	SEPTEMBER 23, 1985	-	5,511,794
648	M-MF Trousers, WGI	CM	7,521,372	MAY 31, 1985	JUNE 17, 1985	-	8,455,000
Korea:							
310/318	Cotton Gingham and Other Yarn-dyed Cotton Fabric	E	3,693,882	OCTOBER 22, 1985	NOVEMBER 25, 1985	JANUARY 1, 1986	3,750,000
342	Cotton Skirts	E	1,259,386	AUGUST 19, 1985	AUGUST 29, 1985	DECEMBER 20, 1985	1,264,000
350	Cotton Dressing Gowns	E	623,271	JULY 31, 1985	AUGUST 19, 1985	DECEMBER 20, 1985	623,271
352	Cotton Underwear	E	1,375,308	AUGUST 19, 1985	AUGUST 29, 1985	DECEMBER 20, 1985	1,437,348
359-H	Headwear Only	E	18,965,289	SEPTEMBER 30, 1985	OCTOBER 28, 1985	JANUARY 1, 1986	19,090,000
605-O	Other Parts not Specified	E	2,356,316	MAY 7, 1985	JUNE 3, 1985	SEPTEMBER 24, 1985	2,450,000
611	Woven Fabrics of S-C Yarns	E	2,101,199	MAY 7, 1985	JUNE 3, 1985	SEPTEMBER 24, 1985	2,250,000
632	M-MF Hosiery	E	7,608,934	AUGUST 19, 1985	AUGUST 29, 1985	DECEMBER 20, 1985	7,705,000
670-U	Braided Luggage Only	ART 3	5,236,512	JULY 29, 1986	AUGUST 14, 1985	JANUARY 1, 1986	2,400,000
Malaysia:							
369-S	Shop Towels Only	CM	3,680,000	JULY 30, 1985	AUGUST 15, 1985	SEPTEMBER 28, 1985	3,910,000
613-C	L/W Non-Cellu/Cot Spun Yarn Fabric	CM	9,624,094	MAY 29, 1985	JUNE 7, 1985	OCTOBER 21, 1985	16,100,000
634	Other M-MF Coats, MB	CM	6,439,537	AUGUST 30, 1985	SEPTEMBER 23, 1985	NOVEMBER 28, 1985	9,293,000
635	M-MF Coats, WGI	CM	4,706,218	AUGUST 30, 1985	SEPTEMBER 23, 1985	NOVEMBER 28, 1985	6,195,000
641	M-MF Non-knit Blouses, WGI	CM	7,537,260	NOVEMBER 1, 1985	DECEMBER 7, 1985	JANUARY 1, 1986	8,265,000
645/646	M-MF Sweaters,	CM	5,662,931	AUGUST 30, 1985	SEPTEMBER 23, 1985	NOVEMBER 28, 1985	6,256,000
648	M-MF Trousers, WGI	CM	7,472,351	MAY 31, 1985	JULY 12, 1985	AUGUST 22, 1985	14,240,000

Cat., Description		Type of Call	Call Level (SYE)	Date of Call	Fed Reg Notice	Date of Import Control	Imposed Limit or Agreed Limits
Nepal:							
337	Cotton Playsuits	ART 3	1,454,700	SEPTEMBER 29, 1985	DECEMBER 23, 1985	DECEMBER 23, 1985	2,343,750
340	Cotton Non-knit Shirts, MB	ART 3	3,180,648	DECEMBER 26, 1985	Not Published	None	4,320,000
Portugal:							
310/318	Cotton Gingham and Other Yarn-dyed Cotton Fabric	204	6,733,536	OCTOBER 31, 1985	DECEMBER 16, 1985	FEBRUARY 18, 1985	6,733,536
339	Cotton Knit Shirts & Blouses, WGI	204	1,856,542	JUNE 26, 1985	DECEMBER 16, 1985	DECEMBER 16, 1985	1,856,542
340	Cotton Non-knit Shirts, MB	204	3,210,552	JUNE 26, 1985	NOVEMBER 20, 1985	NOVEMBER 27, 1985	3,210,552
360	Cotton Pillowcases	204	1,788,691	MARCH 29, 1985	JULY 11, 1985	JULY 11, 1985	1,788,691
361	Cotton Sheets	204	18,478,753	MARCH 29, 1985	JULY 11, 1985	JULY 11, 1985	18,478,753
448	Wool Trousers, WGI	204	178,488	NOVEMBER 26, 1985	DECEMBER 16, 1985	FEBRUARY 24, 1986	178,488
604-A	Acrylic Spun Yarn Only	204	2,351,608	OCTOBER 31, 1985	DECEMBER 16, 1985	FEBRUARY 24, 1986	2,351,608
South Africa:							
335	Cotton Coats, WGI	204	1,070,703	AUGUST 29, 1985	SEPTEMBER 23, 1985	JANUARY 24, 1986	1,249,325
347/348	Cotton Trousers,	204	4,394,090	JULY 31, 1985	AUGUST 13, 1985	JANUARY 24, 1986	4,859,000
433	Wool Suit-type Coats, MB	204	188,784	SEPTEMBER 30, 1985	DECEMBER 3, 1985	JANUARY 24, 1986	188,784
604-A	Other Spun (O-S) M-MF Yarns	204		JULY 31, 1985		JANUARY 24, 1986	2,378,000
604	Spun Non-Cell/yarn	204	3,962,019	JULY 31, 1985	AUGUST 13, 1985	JANUARY 24, 1986	4,920,000
Sri Lanka:							
337	Cotton Playsuits	CM	1,997,575	APRIL 30, 1985	MAY 10, 1985	FEBRUARY 8, 1986	2,500,000
338	Cotton Knit Shirts, MB	CM	1,570,788	JULY 30, 1985	N/A	FEBRUARY 8, 1986	1,670,400
363	Cotton Terry & Other Pile Towels	CM	2,586,442	AUGUST 26, 1985	N/A	FEBRUARY 8, 1986	3,000,000
369-S	Shop Towels Only	CM	3,412,873	APRIL 30, 1985	MAY 10, 1985	FEBRUARY 8, 1986	3,675,400
647	M-MF Trousers, MB	CM	5,933,701	JULY 30, 1985	N/A	FEBRUARY 8, 1986	5,963,000

Cat., Description		Type of Call	Call Level (SYE)	Date of Call	Fed Reg Notice	Date of Import Control	Imposed Limit or Agreed Limits
Taiwan:							
359-I	Infants Sets	E	5,534,886	OCTOBER 16, 1985	N/A	DECEMBER 30, 1985	5,612,000
301	Combed Cotton Yarn	E	1,873,359	AUGUST 21, 1985	SEPTEMBER 3, 1985	DECEMBER 30, 1985	1,873,359
310/318	Cotton Gingham and Other Yarn-dyed Cotton Fabric	E	5,167,409	OCTOBER 16, 1985	NOVEMBER 22, 1985	-	5,600,000
352	Cotton Underwear	E	9,405,000	JUNE 14, 1985	N/A	NOVEMBER 6, 1985	9,405,000
359-H	Headwear Only	E	18,279,103	SEPTEMBER 30, 1985	OCTOBER 23, 1985	DECEMBER 30, 1985	18,400,000
360	Cotton Pillowcases	E	868,542	JUNE 26, 1985	NOVEMBER 14, 1985	NOVEMBER 20, 1985	868,542
361	Cotton Sheets	E	6,169,149	JUNE 5, 1985	NOVEMBER 14, 1985	NOVEMBER 20, 1985	6,169,149
363	Cotton Terry & Other Pile Towels	E	5,910,766	JUNE 26, 1985	N/A	AUGUST 23, 1985	5,910,766
369-L	Luggage Only	E	9,895,713	JUNE 14, 1985	N/A	AUGUST 23, 1985	9,895,713
436	Wool Dresses	E	212,446	JUNE 26, 1985	N/A	OCTOBER 31, 1985	214,000
440	Wool Non-Knit Shirts & Blouses	E	237,072	AUGUST 7, 1985	AUGUST 16, 1985	OCTOBER 8, 1985	240,000
442	Wool Skirts	E	657,342	AUGUST 7, 1985	AUGUST 16, 1985	OCTOBER 8, 1985	668,000
443	Wool Suits, MB	E	206,172	AUGUST 7, 1985	AUGUST 16, 1985	OCTOBER 8, 1985	209,790
611	Woven Fabrics of S-C Yarns	E	1,102,158	JUNE 26, 1985	-	NOVEMBER 6, 1985	1,176,000
614-P	Other Parts Not Specified	E	13,819,048	AUGUST 21, 1985	DECEMBER 23, 1985	DECEMBER 30, 1985	13,925,000
632	M-MF hosiery	E	18,575,481	JULY 10, 1985	AUGUST 2, 1985	OCTOBER 8, 1985	18,860,000
649	M-MF Brassieres, etc	E	3,067,075	SEPTEMBER 17, 1985	OCTOBER 23, 1985	DECEMBER 30, 1985	3,086,000
651	M-MF Nightwear	E	19,564,948	AUGUST 7, 1985	AUGUST 16, 1985	OCTOBER 8, 1985	19,955,000
670-B	Braided Products in 670	204	7,282,276	FEBRUARY 28, 1985	N/A	JUNE 24, 1985	7,418,468
627	Specialty Fabric	E	19,803,989	DECEMBER 30, 1985	FEBRUARY 4, 1986	-	-
614-P	Spun Filament	E	13,819,048	AUGUST 21, 1985	SEPTEMBER 16, 1985	DECEMBER 30, 1985	13,925,000
Thailand:							
301 pt	Combed Cotton Yarn	CM	20,734,012	AUGUST 30, 1985	N/A	DECEMBER 6, 1985	20,734,012
336	Cotton Dresses	CM	3,603,434	MAY 6, 1985	JUNE 26, 1985	NOVEMBER 27, 1985	2,162,000
337	Other Wool Coats, MB	CM	2,231,425	MARCH 29, 1985	N/A	NOVEMBER 27, 1985	1,648,000

Cat., Description		Type of Call	Call Level (SYE)	Date of Call	Fed Reg Notice	Date of Import Control	Imposed Limit or Agreed Limits
434	Other Wool Coats, MB	CM	404,730	AUGUST 30, 1985	N/A	NOVEMBER 27, 1985	404,730
442	Wool Skirts	CM	214,000	SEPTEMBER 30, 1985	N/A	NOVEMBER 27, 1985	241,000
640	M-MF Non-knit Shirts, MB	CM	8,988,384	MAY 6, 1985	N/A	NOVEMBER 27, 1985	7,331,000
Turkey:							
313	Cotton Sheeting	Art 3	12,713,472	FEBRUARY 28, 1985	May 7, 1985	MAY 13, 1985	15,000,000
317-O	Other Twills, execept Denim	Art 3	6,441,771	APRIL 30, 1985	JULY 17, 1985	JULY 17, 1985	6,441,771
335	Cotton Coats, WGI	Art 3	1,541,399	MAY 30, 1985	JUNE 12, 1985	AUGUST 19, 1985	1,541,399
339	Cotton Knit Shirts & Blouses, WGI	Art 3	7,703,328	JUNE 27, 1985	JULY 11, 1985	SEPTEMBER 5, 1985	7,703,328
340	Cotton Non-knit Shirts. MB	Art 3	3,231,096	MAY 30, 1985	JUNE 12, 1985	AUGUST 30, 1985	3,231,096
348	Cotton Trousers, WGI	Art 3	9,352,368	JULY 29, 1985	AUGUST 12, 1985	DECEMBER 19, 1985	9,352,318
361	Cotton Sheets	Art 3	1,172,253	SEPTEMBER 30, 1985	DECEMBER 18, 1985	DECEMBER 18, 1985	1,172,253
Uruguay:							
335	Cotton Coats, WGI	Art 3	1,329,901	AUGUST 29, 1985	SEPTEMBER 13, 1985	MARCH 24, 1986	1,858,500
442	Wool Skirts	Art 3	301,950	OCTOBER 31, 1985	NOVEMBER 22, 1985	-	486,000
Yugoslavia:							
340	Cotton Non-knit Shirts, MB	Art 3	3,541,824	JUNE 28, 1985	JULY 16, 1985	DECEMBER 27, 1985	7,698,120
434	Other Wool Coats, MB	Art 3	410,562	JULY 31, 1985	AUGUST 14, 1985	DECEMBER 17, 1985	459,000
435	Wool Coats, WGI	Art 3	1,757,970	JULY 31, 1985	AUGUST 14, 1985	DECEMBER 17, 1985	2,025,000
448	Wool Trousers, WGI	Art 3	412,794	JUNE 28, 1985	JULY 16, 1985	DECEMBER 27, 1985	845,982

N/A = Not Available
- = None

initiate substantive minority business programs. We will also fund minority business, industry and trade associations, and chambers of commerce to conduct activities designed to strengthen minority businesses in specific industries. These associations are capable of opening the system for minority businesses and creating the linkages necessary for long-term business growth.

Advocacy, Research and Information Program

We do not propose any budget changes in the Advocacy, Research and Information activities. Within existing resources, we will continue our efforts to increase Advocacy activities through MBDCs network and at the state and local level in an effort to increase public and private sector responsiveness to the minority business community. We will also continue to conduct and fund research on minority business and to manage assorted information systems used by MBDCs and other organizations interested in strengthening minority business. I cannot stress enough the importance of information dissemination. The Nation's economy has moved to an information base. In this environment, it is incumbent upon MBDA to be able to provide the kind of information needed by minority business firms and those seeking to do business with them. It is vitally important that minority firms be matched with emerging opportunities. It is becoming increasingly more important for MBDA to provide a clearinghouse of business opportunities as well as provide a roster of firms who can take advantage of them.

Mr. Chairman, this concludes my statement. I will be pleased to answer questions which you or Members of the Committee wish to raise at this time.

DEPARTMENT OF COMMERCE
MINORITY BUSINESS DEVELOPMENT AGENCY

Budget Estimates, Fiscal Year 1987
Congressional Submission

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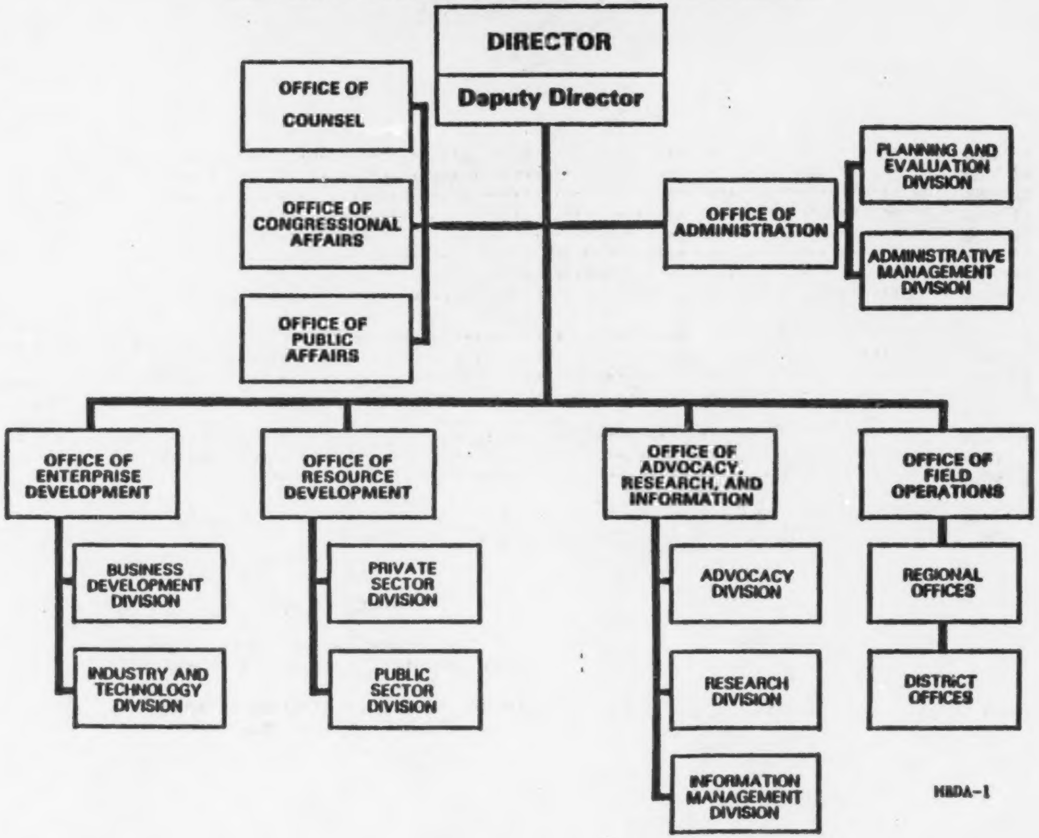
February 1986

ORGANIZATIONAL STRUCTURE

MINORITY BUSINESS DEVELOPMENT AGENCY

United States Department of Commerce


DIRECTOR
Deputy Director
OFFICE OF COUNSEL
OFFICE OF CONGRESSIONAL AFFAIRS
OFFICE OF PUBLIC AFFAIRS
OFFICE OF ADMINISTRATION
PLANNING AND EVALUATION DIVISION
ADMINISTRATIVE MANAGEMENT DIVISION
OFFICE OF ENTERPRISE DEVELOPMENT
BUSINESS DEVELOPMENT DIVISION
INDUSTRY AND TECHNOLOGY DIVISION
OFFICE OF RESOURCE DEVELOPMENT
PRIVATE SECTOR DIVISION
PUBLIC SECTOR DIVISION
OFFICE OF ADVOCACY, RESEARCH, AND INFORMATION
ADVOCACY DIVISION
RESEARCH DIVISION
INFORMATION MANAGEMENT DIVISION
OFFICE OF FIELD OPERATIONS
REGIONAL OFFICES
DISTRICT OFFICES

MBDA-1

General Statement

The Minority Business Development Agency (MBDA), is responsible for coordinating Federal efforts to develop and strengthen minority businesses. The agency, thereby, works to increase business opportunities for minorities in the public and private sector and create an environment that encourages the creation and expansion of competitive minority businesses, thus strengthening the national economy.

The following is a comparison of the FY 1986 appropriation with the FY 1987 estimates and related data on current employment:

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc. (+) or Dec. (-)		Perm. Emp. 12/31
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Minority business development:							
Program level	233	$57,000	233	$57,369	...	+$ 369	
Cost sharing	...	- 12,000	...	- 12,000	...	...	
Appropriation	233	$45,000	233	$45,369	...	+$ 369	207

Program Highlights

The 1987 budget proposes that the Small Business Administration's 8(a) procurement program be transferred to MBDA. This proposal will strengthen minority business assistance by helping to consolidate Federal programs in one Agency. Resources proposed for transfer are $11.4 million and 255 FTE. The budget justification reflects the request for current MBDA programs.

Enterprise Development

The Minority Business Development Center (MBDC) program began in FY 1982. The goal of the program is to provide affordable, high-quality management and technical assistance to minority entrepreneurs in the approximately 100 Metropolitan Statistical Areas (MSA's) with the highest concentration of potential minority businesses. Assistance is provided by a competitively selected private or public organization in each MSA. MBDA headquarters staff develop the program design and regional staff monitor grantee performance. This program has been MBDA's primary service delivery mechanism. The 1987 Enterprise Development program will continue at the 1986 level.

Resource Development

Resource Development programs make significant contributions toward the MBDA goals of increasing opportunities and creating an environment which promotes competitive minority business. Public Sector programs will continue to concentrate on strengthening state and local efforts in minority business and coordinating Federal efforts relating to minority business goals. Private Sector programs promote business awareness and support of minority business. Trade associations, chambers of commerce, and other private groups will be encouraged to conduct seminars, training, and workshops for their members and the minority business community. The business and industry association funding policy encourages minority trade associations and chambers of commerce to become self-sustaining. Grantees will be selected based on their ability to contribute to MBDA goals.

FY 1987 Resource Development programs will be carried out at the same resource levels as 1986.

Advocacy, Research and Information

Advocacy, Research and Information programs will continue at the 1986 level. MBDA will concentrate efforts on outreach and public information activities which act to remove barriers to minority business development. Among these barriers are the minority community's lack of access to information on how to start and expand a business, as well as the general public's lack of awareness of the high quality goods and services which are produced by the minority business community.

Activity/Subactivity Change Crosswalk
(Dollar amounts in thousands)

Format of Fiscal 1986 Congressional Budget Submission

Appropriation/Activity/Subactivity

Minority Business Development

Enterprise Development	
Business Development Services	$35,398
Industry and Technology Development	1,243
Total	$36,641

Format of Fiscal 1987 Congressional Budget Submission

Appropriation/Activity/Subactivity

Minority Business Development

Enterprise Development	
Business Development Services	$36,641
Total	$36,641

Justification for Proposed Language Changes

1. After the words "for fiscal year", substitute "1987" for "1986" and delete the balance of the paragraph.

   The change deletes the reference to the Department's use of the Working Capital Fund under the terms of P.L. 99-180 making appropriations for FY 1986. The language is of a Departmentwide nature and unnecessary in light of existing reprogramming requirements.

Appropriation Language and Code Citations

1. For necessary expenses of the Department of Commerce in fostering, promoting, and developing minority business enterprise,

15 U.S.C. 1512

15 U.S.C. 1512 authorizes the Secretary of Commerce to foster, promote and develop business, foreign and domestic.

2. Including expenses of grants, contracts, and other agreements with public or private organizations,

No Specific Authority

This phrase has been in the appropriation since FY 1980 and specifies that program expenses are included in the total appropriation request.

3. $45,369,000, of which $31,495,000 shall remain available until expended:

No Specific Authority

31 U.S.C. 718 provides that: "No specific or indefinite appropriation.... shall be construed to be permanent or available continuously without reference to a fiscal year.... unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriation Act in which it is contained makes provisions".

4. Provided, that not to exceed $13,874,000 shall be available for program management.

No Specific Authority

This phrase has been in the appropriation since FY 1973 and limits the amount of funds for program management.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Minority business development

Page No.	Summary of adjustments to base and built-in changes	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986....................			233	$45,000
MBDA- 8	Adjustments to base and built-in changes:				
	Other increases...	...	+$ 423		
	Other decreases...	...	- 54		
	Subtotal, adjustments to base and built-in changes.....			...	+ 369
	1987 Base...			233	45,369

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) Dec. (-) Over 1987 Base	
	Comparison by activity	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
MBDA-10	Enterprise development	166 (161)	$40,248 (32,548)	166 (172)	$36,388 (41,710)	166 (178)	$36,641	166 (178)	$36,641	...	$ ...
MBDA-12	Resource development..	37 (36)	6,288 (6,629)	37 (39)	5,541 (11,416)	37 (41)	5,601	37 (41)	5,601	...	...
MRDA-15	Advocacy, research & information.........	30 (29)	3,044 (2,675)	30 (31)	3,071 (3,270)	30 (31)	3,127	30 (31)	3,127	...	...
	Change................									...	$ ...
	Total requirements....	233 (226)	$49,580 ($41,852)	233 (242)	$45,000 ($56,396)	233 (250)	$45,369	233 (250)	$45,369		

Note: Permanent position amounts in parenthesis represent workyears and amounts in parenthesis represent obligations.

Justification of Adjustments to Base and Built-In Changes
(Dollar amounts in thousands)

	Perm. Pos.	Amount
Other increases		
Restoration of 1986 pay reduction	...	+$ 73
Within-grade step increases	...	...
Rent payments to GSA	...	+ 218
Working Capital Fund	...	+ 132
Subtotal, other increases	...	+ 423

Full costs of the pay cut restoration are $361,000. The amount funded in fiscal year 1986 was $288,000, leaving $73,000 to be funded in fiscal year 1987.

The computation of within-grade step increases is as follows:

A. Estimated number of within-grade step increases scheduled	134	
B. Step increases not earned due to turnover	21	
C. Average step above step 1 per separation	2	
D. Average cost per within-grade step increase	968	
E. Gross cost of scheduled step increases (134 X 968)		$129,712
F. Less savings due to separations (21 X 2 X 968)		- 40,656
Subtotal, personnel compensation		89,056
Personnel benefits at 8.1%		7,214
Total cost		$ 96,270
Amount absorbed		-$ 96,270

GSA rate increases for 1987 require a $218,000 adjustment above the 1986 level for currently occupied space.

The Department estimates that 1987 charges for the Working Capital Fund will increase by $132,000 over the 1986 level.

Other decreases

	Perm. Pos.	Amount
Employees Compensation Fund	...	-$ 3
Management savings	...	- 51
Subtotal, other decreases	...	- 54

The decrease of $3,000 in repayment to the Employee's Compensation Fund is the result of lower costs in the year ending June 30, 1985, than in the year ending June 30, 1984. The 1985 charges will be reimbursed to the Department of Labor, Employee's Compensation Fund in 1987, pursuant to Public Law 86-767, as amended.

These savings reflect a goal of reducing the cost of positions in grades 11-15 by $51,000. These savings may be achieved by improved overall position management or through other administrative cost reductions.

Justification of Program and Performance
(Dollar amounts in thousands)

Activity: Enterprise development

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) Dec. (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Business development...............	166	$40,248	166	$36,388	166	$36,641	166	$36,641	...	$ ...
	(161)	(32,548)	(172)	(41,710)	(178)		(178)			
Total requirements...............	166	$40,248	166	$36,388	166	$36,641	166	$36,641	...	$ ...
	(161)	($32,548)	(172)	($41,710)	(178)		(178)			

Note: Permanent position amounts in parenthesis represent workyears and amounts in parenthesis represent obligations.

Goals and Objectives

Goal

Encourage the creation and expansion of minority business.

Objectives

Provide Direct and Indirect Management and Technical Assistance.
Improve internal management efficiency and effectiveness.

Enterprise Development Workload and Performance Measures

Indicators	1985 Actual	1986 Estimate	1987 Estimate
Value of loans obtained for MBDC clients..	$250 M	$350 M	$350 M
Value of procurements obtained for MBDC clients..	$550 M	$800 M	$800 M
Number of clients assisted by MBDCs..	8,000	8,000	8,000

Base Program

MBDA's Enterprise Development activities promote the creation, existence, and expansion of competitive minority businesses by providing business development services to minority firms and entrepreneurs. Business Development services, such as management and technical assistance, brokering, information, and referrals are made available through MBDA-funded organizations. MBDA headquarters and field staff work together to ensure that funded organizations provide quality assistance to their clients. Organizations are required to provide cost-sharing contributions to further the program effort. Cost-sharing amounts may be met through discounted client fees, in-kind contributions, and/or non-Federal cash contributions. In 1986, Enterprise Development programs are estimated to contribute approximately $8 million in cost-sharing contributions.

This activity includes MBDA's Minority Business Development Center Program (MBDC) and MBDA's Indian Initiative. The MBDC program is the Agency's largest single program effort, and is comprised of approximately 100 funded organizations or MBDCs. The MBDCs operate throughout the country in 90-100 Metropolitan Statistical Areas (MSAs) selected for their high concentrations of minority population, minority businesses, and minority business formations. The designated MSAs represent approximately 69% of the minority population, 83% of the minority businesses, and 65% of the minority business formations located in Metropolitan Statistical Areas in the country. The MBDC network serves as the primary point of contact between MBDA and the minority businessperson. Clients receive information, referrals counseling, and brokering assistance for business and market opportunities, and technical assistance in business planning, financing, marketing and management. MBDCs coordinate and receive other Federal, state, local, and private resources and implement expanded local outreach efforts. The MBDCs play a key role in the advocacy of minority business by identifying constraints to minority business, and through efforts to remove barriers to business formation and growth. MBDCs have access to the MBDA national telecommunications information network which involves computerized data bases to assist the MBDCs in matching local businesses with business opportunities nationwide.

The main coordinative functions of each MBDC are to: (1) act as a resource manager, promoting and identifying public and private resources which are available to area minority business enterprises, (2) interact, refer, and otherwise make available to clients assistance that is available through other MBDA-funded programs, (3) provide management and technical assistance, and (4) disseminate information to local minority business enterprises.

The Indian Initiative is comprised of seven Indian Business Development Centers (IBDCS) and one National Indian business consultant. The IBDCs provide business development services to tribal and urban Indians. The Indian business consultant organization provides specialized consultant services nationally.

Program Changes for FY 1987

All Enterprise Development activities will continue at the FY 1986 level in FY 1987.

Activity: Resource development

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) Dec. (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Public sector......................	21	$ 3,423	21	$ 3,067	21	$ 3,095	21	$ 3,095	...	$ ...
	(20)	(3,186)	(22)	(3,313)	(23)		(23)			
Private sector.....................	16	2,865	16	2,474	16	2,506	16	2,506	...	...
	(16)	(3,443)	(17)	(8,103)	(18)		(18)			
Total requirements..............	37	$ 6,288	37	$ 5,541	37	$ 5,601	37	$ 5,601	...	$ ...
	(36)	($ 6,629)	(39)	($11,416)	(41)		(41)			

Note: Permanent position amounts in parenthesis represent workyears and amounts in parenthesis represent obligations.

Goals and Objectives

Goal

Encourage the creation and expansion of minority business.

Objectives

Stimulate and coordinate public-sector initiatives.
Implement provisions of Executive Order 12432, establishing Federal goals for minority business.
Stimulate and coordinate private sector initiatives.
Stimulate and coordinate increased minority business participation in the broadcast and other related telecommunications industries.
Implement the White House initiative on Minority Enterprise Development Week.
Implement the National Partnership Program.
Improve internal management efficiency and effectiveness.

Resource Development Workload and Performance Data

Indicators	1985 Actual	1986 Estimate	1987 Estimate
Number of trade associations receiving assistance for minority business programs..................	10	12	12
Minority procurement by state and local governments funded by MBDA................................	$450 M	$375 M	$375 M
Total Federal procurement from minority business..	$5.5 B	$6 B	$6 B

Base Program

MBDA's Resource Development programs promote the creation of business opportunities for minorities in the public and private sectors by networking, brokering, and awareness activities. Funding is provided to selected public and private sector organizations to conduct activities which increase minority business exposure to business opportunities, develop management capabilities in minority entrepreneurs, and increase minority youth awareness of business as a career alternative. The Office of Resource Development also coordinates Federal activities designed to meet the provisions of Executive Order 12432. Resource Development activities fall under two (2) main categories: (1) Public Sector, and (2) Private Sector. Funded organizations are required to cost share. In 1986, these programs will generate approximately $4 million in cost sharing.

Public Sector efforts consists of two components in 1986. The State and Local effort encourages these governments to develop their own minority business assistance activities by providing funds to a limited number of state and local Offices of Minority Business Enterprise to establish and strengthen non-Federal public sector minority business programs. Funded governments are required to work with the local MBDC network by identifying minority businesses and providing access to, and training on, state and local procurement opportunities. Funded organizations are encouraged to conduct innovative programs tailored to local conditions. The State and Local grant program is designed to encourage eventual non-Federal full financial support for these activities. MBDA provides a gradually decreasing share of financial support over a three to five year period. A number of funded governments will have "graduated" from the program in 1986. 1986 funds will be targeted at governments which are committed to continuing minority business programs after MBDA's financial support terminates. This 1986 activity will allow Public Sector programs to continue to focus on the most productive projects in 1987. A slight decline in minority procurements by state and local governments funded by MBDA is anticipated, since "graduating" governments tend to have larger procurement programs.

The second component of the public sector subactivity increases the impact of Federal minority business assistance efforts pursuant to the provisions of Executive Order 12432. This is done through establishing uniform guidelines for all Federal minority business efforts and monitoring these efforts to meet all Federal procurement, credit, and other objectives. Specific efforts will address: Capital Development, Market Development, sector - specific Management and Technical Assistance, information dissemination, and local delivery of Federal resources. An annual plan specifying minority enterprise development objectives for each agency has been developed and is updated annually. Progress reports on each agencies' activities are reported to the President. MBDA issued Government-wide guidance to top Federal procurement agencies explaining how Offices of Small and Disadvantaged Business Utilization and other officials are to report on Agency minority business progress. This guidance also provides a reporting mechanism, a quarterly monitoring system, and facilitates the reporting of virtually all government activity in the area. MBDA works directly with Federal agencies and through activities such as the Minority Business Opportunity Committees (MBOCs) to facilitate Federal minority business assistance activities at the local level. MBOCs are made up of local Federal executives from Federal agencies, state/local officials, and community business leaders. They help implement the local procurement effort, coordinate local MBE programs and assist in facilitating participation in local Federal markets. They provide information about local market and management and technical assistance opportunities through member agency program offices. MBDA also negotiates and implements special working agreements with other Federal agencies to cooperatively address particular minority business program initiatives or issues which require interagency action.

The Private Sector subactivity consists of three components.

The Business and Industry component of the Private Sector activity acts to increase MBE participation in the private sector business community through Private/Public activities. MBDA assists at least ten (10) minority business and industry associations, and chambers of commerce to conduct a variety of activities designed to strengthen minority businesses in their specific industries. These organizations provide general industry information, educational training, credit information, management and technical assistance sources, and industry market opportunities to their members. Minority business and industry associations provide forums for exchange of ideas between MBEs and industry leaders, and promote minority business development in prospective industries through workshops, seminars, conventions, newsletters, and other meetings. In 1986, MBDA continues to implement a revised trade association funding policy adopted in 1984. This policy is intended to ensure that minority trade associations actively work toward becoming self-sustaining. A new effort in 1986 begins the implementation of an agreement between MBDA and the National Telecommunications and Information Administration (NTIA) to increase the minority business community's participation in the telecommunications industry. Technical assistance and information activities, and a series of seminars on the industry are planned for 1986. In 1986, MBDA is studying methods for providing for greater private sector involvement in MBDA programs in future years. MBDA will seek to strenthen relationships with private industry councils (PIC's) and other local business organizations who can play a significant role in developing minority business.

The Management Development component of the private sector subactivity works with corporations, colleges, and universities (including historically black colleges and universities) and state and local school systems to increase business management, entrepreneurial development, and youth awareness. State and local educational systems will assist in designing and implementing courses to promote business enterprise and entrepreneurship. This activity was initiated in FY 1985 by promoting partnerships between industry, education, and government for economic and business development. In FY 1986, MBDA's National Partnership Program will promote industry, education, and government partnerships in these major areas: (1) partnerships that directly support minority businesspersons; (2) partnerships that enhance the business development capacity of minority schools; and (3) partnerships that support youth business awareness, business training, and the development of youth business.

Venture Capital sources are identified through the formation of a financial data base collected by the MBDC network. The data base provides detailed information on financial, corporate, and other entities that are willing to invest in minority businesses. The data indicates the type of venture and maximum amount of funds to be made available by each listed source. The information is made available to minority businesses seeking funding sources. Other sources of financing to support minority businesses will be pursued in collaboration with financial experts. Thus, MBDA identifies investors interested in minority business ventures through: (a) financial consortia, (b) joint ventures, (c) corporate investors, (d) credit pools, and (e) lines of credit. Another data base is being developed to provide specific information on existing and potential participants who are willing to place deposits in minority financial institutions. A selective screening process will be used to assure the inclusion of interested participants only. The information will be disseminated to minority financial institutions for their use in increasing the levels of existing deposits and attracting new depositors. This effort is expected to enhance the financial status of minority institutions by 5% and generate increased revenue for minority business investment.

Program Changes for 1987

All Resource Development activities will continue at the FY 1986 level in FY 1987.

Activity: Advocacy, research and information

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) Dec. (-) Over 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Advocacy...........................	5	$ 197	5	$ 199	5	$ 205	5	$ 205	...	$...
	(5)	(197)	(5)	(199)	(5)		(5)			
Research...........................	7	1,219	7	1,230	7	1,242	7	1,242	...	...
	(6)	(1,003)	(7)	(1,329)	(7)		(7)			
Information management.............	19	1,628	18	1,642	18	1,680	18	1,680	...	...
	(18)	(1,475)	(19)	(1,742)	(19)		(19)			
Total requirements...............	31	$ 3,044	30	$ 3,071	30	$ 3,127	30	$ 3,127	...	$...
	(29)	($ 2,675)	(31)	($ 3,270)	(31)		(31)			

Note: Permanent position amounts in parenthesis represent workyears and amounts in parenthesis represent obligations.

Goals and Objectives

Goal

Encourage the creation and expansion of minority business.

Objectives

Improve the acquisition, analysis, and dissemination of information for and about minority-owned business.
Conduct research studies on Minority Business Enterprise characteristics, problems, and development trends.
Improve internal management efficiency and effectiveness.

Advocacy, Research & Information Workload and Performance Data

Indicators	1985 Actual	1986 Estimate	1987 Estimate
Number of information requests handled by Information Clearinghouse..............................	6,000	6,000	6,000
Number of organizations with direct access to MBDA's PROFILE and Information system...............	100	100	100

The performance of the research program is determined by the value of research findings to the policy making process.

Base Program

The Advocacy, Research and Information activity collects, maintains, and establishes general purpose data on the characteristics of MBDA clients and the general minority business community, and develops special purpose data to support priority programs. Information is analyzed and presented to MBDA program staff and others outside the agency. Research is conducted to increase awareness of trends, characteristics, and problems of minority business and to realign MBDA programs accordingly. An Information Clearinghouse disseminates Federal and other source information on minority businesses, and vendor lists for public procurement and private purchase opportunities. The function of the Advocacy component is to raise the level of consciousness of policy-makers and business leaders to the recognition of minority business contributions to the economy.

The Advocacy subactivity is a major communication and agency outreach support effort dedicated to increasing public and private sector support and responsiveness to the minority business community. This effort has been directed at the national level but following the program re-emphasis initiated in FY 1985, more emphasis is being placed at the state and local level as well as with the private sector by working with or through the MBDA program offices and field structure and the national network of Business Development Centers (BDCs). The Advocacy component advises the agency of significant actions by Congress, Federal and other agencies that have a major impact on minority business. The program will continue to initiate comments on and/or respond to requests from the Office of Counsel, the White House, Congress, and Federal agencies seeking specific information on business issues, policies and administrative regulations. Major topic areas will be capital access, taxes, economic stability, export expansion, government set-aside programs, and Federal grant and procurement opportunities for minority business in the public and private sector. Furthermore, the program is responsible for providing assistance in the development and maintenance of a nationwide network for advocacy that will: (1) use the Agency's national funded network to improve the communication of new ideas and/or problems between minority business, providers of assistance to minority firms, agencies, and corporations who generate contract opportunities and financial resources for minority firms, (2) assist in the establishment of forums which publicize business accomplishments and/or look at the issues and constraints facing minority business, and (3) upgrade the quality of the Advocacy Alert Bulletin (an information and advisory publication) which is provided to the national MBDC network.

The Research program objective supports the Departmental goals by developing measures of minority business change over time, researching the unique problems of minority business and how they can contribute to economic development, and recommending policies and programs based on theoretically and empirically defensible research findings.

The Research subactivity plans the direction and emphasis of the research program; conducts in-house research on minority business; conducts an annual competitive program of contracted research; plans and maintains research data bases; promotes interest in and improves capability in research on minority business, and provides advice to agency management for future policy and program direction.

Agency research efforts are concentrated in the following areas: (1) measurement of the rate of minority participation in entrepreneurial activities and exploration of the socio-economic reasons for differences in that rate from the non-minority community; (2) measurement of the formation, growth and failure rates of minority businesses, and the underlying socio-economic causes of differential rates between the minority and non-minority business sectors, and; (3) investigations of the micro and macro socio-economic environment in which minority businesses operate, and a determination of the degree to which that environment is different from non-minority businesses.

The Census Bureau has released the 1982 Survey of Minority-Owned Business Enterprises. In 1986, the Survey is being analyzed by Agency staff and contractors to determine progress in formation, expansion and failure rates since 1977. The competitive contract research program will result in 3-6 research studies based on results from the 1982 Survey and from previously funded research contracts. Increasing emphasis will be placed on various types of seminars where researchers can discuss their findings with officials responsible for making decisions about policies, programs and legislation which affect minority business development.

The Information Management program both identifies and develops automated information systems which can substanially increase the efficiency of the Agency and BDCs and contribute to the productivity of minority vendors. The Information Clearinghouse Center is operated so as to reduce the costs associated with the acquisition, processing, and dissemination of information.

The Information Management Program uses information technology -- computer, nationwide telecommunication networks and access to automated information systems, to provide minority business clients with access to comprehensive, timely, and useful business information. The Information Clearinghouse Center provides a focal point for the acquisition and dissemination of information for and about minority business.

The Information Management component also has developed and operates the PROFILE system, a national automated minority vendor information system. The system provides a basic source of knowledge for identifying and assisting minority vendors in this country. All BDCs are linked together on an electronic communications network. This effort is part of overall Information Management Program activities to close the information gaps facing minority business.

Increasingly, our country is becoming an information based society. By utilizing modern tools such as electronic mail, automated information storage and retrieval systems and implementing a nationwide telecommunications network, the Agency is enhancing its efficiency and productivity in accessing and transmitting information. By identifying and developing access to proprietary business information systems for direct use by the Business Development Centers, the Information Management program directly contributes to the goal of creating an environment that encourages the creation and expansion of competitive minority business.

In FY 1986, the Information Management program will continue its development of the Information Clearinghouse Center and its management of the funds and activities of the automated business information system for the BDCs. The Information Management program will maintain the services of the Information Clearinghouse Center. The Center will use electronic mail to transmit time-sensitive information to MBDC's throughout the country. As the focal point of the information network, the Center develops and distributes material on domestic marketing, export marketing and financial resources using information kits. In addition, the minority business bibliographic system is on-line for direct access by the BDCs. This system identifies reports, studies, and statistics relevant to minority business problems.

Program Changes for 1987

All Advocacy, Research and Information activities will continue at the FY 1986 level in FY 1987.

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Minority business development

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount	Emp. 12/31
11 Personnel compensation:										
11.1 Full-time permanent.........	233	207	$ 8,211	233	207	$ 8,211	...	...	$ ...	207
11.3 Other than full-time permanent......................	50	43	260	50	43	260	...	...	...	12
11.5 Other personnel compensation	...	...	68	...	...	68	...	...	...	...
Total..................	283	250	8,539	283	250	8,539	...	...	...	219
Other objects:										
12 Personnel benefits..........			903			903			...	
21 Travel & transportation of persons..................			337			337			...	
22 Transportation of things....			75			75			...	
23.1 Standard level user charges.			1,078			1,078			...	
23.2 Other rent, communication, & utilities..............			427			427			...	
24 Printing & reproduction.....			189			189			...	
25 Other services..............			5,735			5,735			...	
26 Supplies & materials........			45			45			...	
31 Equipment...................			41			41			...	
41 Grants, subsidies & contributions..................			28,000			28,000			...	
Total requirements......			$45,369			$45,369			$ ...	

Justification by Object Class
(Dollar amounts in thousands)

Appropriation: Minority business development

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount	Emp. 12/31
11.1 Full-time permanent										
General schedule............	225	199	$ 7,793	225	199	$ 7,793	...	...	$ ...	202
Senior Executive Service....	8	8	418	8	8	418	...	...	...	5
Total, permanent positions	233	207	8,211	233	207	8,211	...	...	...	207
11.3 Other than full-time permanent										
General schedule............	50	43	260	50	43	260	...	...	..	12
11.5 Other personnel compensation										
Overtime pay................			44			44			...	
Employee awards.............			24			24			...	
Total, other compensation.			68			68			...	
12.1 Personnel benefits										
Civil Service Retirement....			541			541			...	
Federal Insurance Contribution Act (FICA)...........			100			100			...	
Health Insurance............			239			239			...	
Life Insurance..............			22			22			...	
Employees' Compensation Fund			1			1			...	
Total, personnel benefit..			903			903			...	
21.0 Travel & transportation of persons										
Per diem...................			87			87			...	
Air fare...................			208			208			...	
Other common carrier.......			19			19			...	

GOAL AND QUOTAS

Mr. SMITH. In what way are you involved with this lack of agreement within the administration about goals and quotas?

Mr. GONZALES. We have no problem, Mr. Chairman, with that situation. We have a pretty well-defined scope of work for minority business in the original executive order in 1969. It defines specifically who minorities are. It defines specifically what the role of the agency is.

We don't have any standards to contend with as other agencies, so, therefore, any minority who meets that criteria is available to us and we work with them. We don't have a problem with that situation.

Mr. SMITH. So how this is finally resolved on quotas and goals has no effect on you, are you saying?

Mr. GONZALES. We have been fortunate in that our programs have been very well-defined in that respect. We have never had any problems—for example, in recovering information, gathering information on minority businesses as Executive Order 12432 has proved. We don't have any concern in that area. I don't think we would be affected dramatically.

GSA RENT

Mr. SMITH. You have a very substantial increase for GSA space requirements. What is the nature of that? Is this to increase the number of square feet or are they just charging you more money?

Mr. GONZALES. They are charging us more.

Mr. SMITH. For the same amount of space?

Mr. GONZALES. Yes, sir.

SEQUESTRATION

Mr. SMITH. Are you able to take care of the sequestration without any RIFs or furloughs?

Mr. GONZALES. Yes, sir. We will assume the cuts, across-the-board without any RIFs, any furloughs or any closing of field offices.

Mr. SMITH. Are you expecting, though, to restore those reductions in 1987?

Mr. GONZALES. Yes, sir.

Mr. SMITH. To what extent are you just postponing something rather than saving money?

Mr. GONZALES. We are not filling critical vacancies that exist at the present time, and we will take care of the rest through administrative cost reductions in our agency.

Mr. SMITH. So part of it is permanent savings and part of it is delaying an expenditure?

Mr. GONZALES. Yes, sir, I believe so but I will check.

Mr. SMITH. Do you have a breakdown of what percent?

Mr. GONZALES. No, sir, we don't.

Mr. SMITH. For the record, let's get some kind of a breakdown.

[The information follows:]

Our 1986 Gramm-Rudman-Hollings sequestration represents one-time savings only. Thirty percent (30%) of the reduction comes from program management activities and includes not filling vacancies for part of the year. The remaining 70% of the reduction will come from program funds. All program areas will be reduced equally. The program reductions will be realized by reducing the specialized consulting services component of the MBDC program and the number of public and private sector grants during 1986. In the Advocacy, Research and Information program activity, we will limit the scope of this year's sponsored research.

1987 SERVICES

Mr. SMITH. Under your proposed budget, what level of service would you have in 1987 compared to 1986 after sequestration?

Mr. GONZALES. We will have the same amount of services delivered. We are maintaining the same number of business development centers, which is our main delivery system.

We are not proposing to cut back any type of service activity to the minority business community.

Mr. SMITH. Did we give you too much money in 1986?

Mr. GONZALES. No, sir.

Mr. SMITH. Can you do this in 1987 with less money?

Mr. GONZALES. No, sir, we are being very careful to look at our money. For example, if necessary, we have a specialized consulting service feature which is part of every minority business development center. We are prepared to recoup this back into the fold if there arises a need to do so. That specialized consulting service, is 10 percent of every grant that we execute throughout the country.

Mr. SMITH. Why weren't you doing that in 1985?

Mr. GONZALES. We did not anticipate that we would need to do so. We were hoping that our business development centers would be utilizing those funds to provide that assistance, which was not available at the minority business development center level.

Mr. SMITH. So as long as you had plenty of money, you weren't as efficient as you could have been?

Mr. GONZALES. We found that business development centers were not utilizing all the specialized consulting services. That does not mean to say we have not utilized these funds.

We have, by funding additional projects which we had no appropriations for, specialized projects, pilot demonstration projects throughout the country that benefit the minority business communities.

Mr. SMITH. If we cut you some additional comparable to the sequestration, will you find some other place you can be more efficient?

Mr. GONZALES. We are pretty well down to the wire at this stage.

Mr. SMITH. What if you do get another sequestration in 1987? How will you handle that?

Mr. GONZALES. I think we will have to look at our budget again without sacrificing the service delivery to the minority business community.

Mr. SMITH. You will be able to do it without sacrificing service?

Mr. GONZALES. I would not be able to tell you at this time, sir.

Mr. SMITH. If you do have to reduce your services, what services would you reduce first?

Mr. GONZALES. I am not in a position to provide that information, sir, at this time.

Object Class		1987 Base			1987 Estimate			Inc. (+) or Dec. (-)		
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
	Privately-owned automobiles			15			15			...
	GSA vehicles................			8			8			...
	Total, travel & transportation of persons..			337			337			...
22.0	Transportation of things									
	Freight......................			55			55			...
	Express......................			20			20			...
	Total, transportation of things.................			75			75			...
23.1	Standard level user charges			1,078			1,078			...
23.2	Other rent, communications & utilities									
	Federal Telecommunications Systems...................			200			200			...
	Other telephone, telegraph & teletype services......			60			60			...
	Postal services by USPS....			87			87			...
	Rental of office copying equipment................			10			10			...
	Other equipment rental.....			70			70			...
	Total, other rent, communications & utilities			427			427			...
24.0	Printing & reproduction									
	Publications.....			169			169			...
	Other printing & reproduction..................			20			20			...
	Total, printing & reproduction................			189			189			...

	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)		
Object Class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
25.0 Other services									
Training:									
University................			31			31			...
Office of Personnel Mgt...			34			34			...
Other.....................			3			3			...
Maintenance of equipment....			30			30			...
GSA alterations & repairs...			5			5			...
Centralized Departmental Services..................			2,016			2,016			...
Other services..............			121			121			...
Program contracts...........			3,495			3,495			...
Total, other services.....			5,735			5,735			...
26.0 Supplies & materials									
Office supplies & material..			33			33			...
Books & periodicals.........			10			10			...
Other.......................			2			2			...
Total, supplies & material			45			45			...
31.0 Equipment									
Office furniture & fixtures.			22			22			...
Office machine & equipment..			19			19			...
Total, equipment..........			41			41			...
41.0 Grants, subsidies & contributions									
Grants.....................			28,000			28,000			...

Minority Business Development Agency
Minority Business Development

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thouands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	$ 41	$ 12	$ 12	$ 12
Pamphlets	42	20	20	20
Audiovisuals	...	22	15	15
Total	$ 83	$ 54	$ 47	$ 47

Executive Order 11625 authorizes the Minority Business Development Agency (MBDA) to provide "for the development, collection, summarization, and dissemination of information that will be helpful to persons and organizations throughout the nation in undertaking or promoting the establishment and successful operation of minority business enterprise." MBDA's Office of Public Affairs is responsible for the creation of periodicals, publications, and audiovisuals to carry out the mandate set forth in Executive Order 11625.

Minority Business Development Agency
Minority Business Development

Average Grades and Salaries

	1985 Actual	1986 Estimate	1987 Estimate
Average ES Salary	$59,359	$58,490	$58,490
Average GS Grade	10.75	10.95	10.95
Average GS Salary	$28,919	$30,684	$30,684

Minority Business Development Agency
Minority Business Development
Consulting and Related Services
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$...	$...	$...
Management and professional services	73	50	50
Special studies and analyses	...	...	...
Management and support services for research and development	...	...	...
Total	$ 73	$ 50	$ 50
Amount withheld from obligation pursuant to P.L. 99-190		-5	

PROGRAM DELIVERY SYSTEMS

We consider our three basic program delivery systems to be very essential. We are the only minority business agency at this time, in addition to the 8-A program.

Mr. **Smith**. Are you saying you think that they are all three of equal priority?

Mr. **Gonzales**. Well, our minority business development center network is our primary contact with the minority business community and the private sector out there. We are located in approximately 39 states. Those centers are selected on the basis of minority business formations, minority populations, so we try and serve the areas that have the greatest need for that service.

Our advocacy research and information program is considered dramatically important because we are in an information era. We no longer have to answer questions about the largest minority problem being a lack of capital resources or a lack of technical assistance. We are providing that.

But our primary problem today is the information that the minority business community doesn't have. We are finding they don't know where to go for assistance, for example, in dealing with government and we can play an important part in assisting them in that respect.

The program of Resource Development brings us together with the public and the private sector. We are finding out that, as more and more minority businesses are identified capable of doing business with government, as 8-A contractors have done in the past, that we are graduating or branching out in the private sector. And again, this program that we fund can also help us look at the state and local governments, for example, for additional procurement opportunities for those corporate minority entities.

So all three programs would be very, very effective, and I would not see a way that we could cut any one of them.

Mr. **Smith**. If you had to make a reduction, how do you reduce one of those programs?

Mr. **Gonzales**. If I had to make a choice, and I would not be in favor of it, but if I had to, then I would shift the responsibility back on state and local governments. That would be the only response or the most immediate response that I would make at this time.

Mr. **Smith**. Could you reduce the number of these centers or would you leave an area uncovered if you did?

Mr. **Gonzales**. We have done so only in those areas where we find that a savings can be realized without sacrificing delivery of services to any specific area. We did that last year on a couple of occasions where we found that our money could be better utilized by centralizing operations in a large business development center and providing a circuit rider type of activity to outlying areas.

Mr. **Smith**. Do you think you ended up with a superior service, then, or not?

Mr. **Gonzales**. I believe so. I think we did, sir.

Mr. **Smith**. Metropolitan areas you are talking about?

Mr. **Gonzales**. Yes, sir. Since we have more resources to bring—since we have resources either from a financial viewpoint, government agencies, localized government efforts, we find that we are better off by centralizing centers. We have 97 as of last count.

Mr. SMITH. Largely metropolitan area centers?

Mr. GONZALES. Not necessarily. We try to locate those where there is a major concentration of minority population, and lately, we have added even minority business formations to that criteria. That is included in the way that we select the centers.

Mr. SMITH. If we have any other questions, we will submit them for the record.

Mr. GONZALES. Thank you, sir.

Mr. SMITH. Thank you.

[Questions for the record follow:]

"Questions for the Record by Congressman Neal Smith"

Fiscal Year 1986 Activities

QUESTION:

In our 1986 Committee report, we directed MBDA not to close any offices and to carryout activities at all locations in 1986 that were conducted in 1985, yet we have learned that some offices have been closed and contracts not renewed, such as in Flint, Michigan. Although we were told by the Department until six weeks ago these offices were continued to be funded. Can you please explain what the discrepancy is here?

ANSWER:

The Flint MBDC was closed as of March 31, 1985, before the subject House report was issued. The Department closed the Flint, Michigan MBDC due to internal management problems and program deficiencies of the grantee recognized by MBDA and the Office of the Inspector General (IG). The Department's IG recommended not to renew the Flint MBDC award to the Flint Community Development Corporation in their September 1984 audit because of these deficiencies. Also, the Department was able to realize cost savings through consolidation during a time of budget constraints. Services are being provided to the Flint, Michigan minority business community through the Detroit MBDC. During the nine (9) month period, October 1, 1982 through June 30, 1983, the Flint BDC provided substantial assistance to only 14 clients. Based on this experience, MBDA has arranged for a circuit rider to assist Flint's minority business clients based on requests.

QUESTION:

We also provided language that instructed you within existing resources to open an office in Northern Ohio. What is the status of that office?

ANSWER:

MBDA will establish a Canton satellite office with approximately 2 full-time positions through an amendment to the Cleveland, Ohio MBDC grant. This amendment will be implemented by July. Because of Gramm-Rudman-Hollings reductions, the Canton office will be funded at $67,000.

Fiscal Year 1987 Budget Request

QUESTION:

You are requesting resources to carryout the same level of programs in 1987 that you carried out in 1986. Do you plan to change your program delivery mechanism or the way in which you operate or your cost-sharing activities in 1987?

ANSWER:

No, MBDA does not plan to change the program delivery mechanism, the way in which we operate or our cost-sharing activities in 1987.

QUESTION:

Please discuss your rental increases of $218,000 to GSA. Is this for your space in the Hoover building or space outside? What is the level of total investment you have been able to secure through MBDA assistance in 1986? What is the projected level for 1987 for total investment? What is the average level of assistance that an MBDA client has been able to secure?

ANSWER:

The rental increase is due to GSA's rate increase for the Hoover building and Field Offices. For Fiscal Years 1986 and 1987, MBDA anticipates securing approximately $350 million in loans and $800 million in contracts for clients assisted with management and technical assistance. The average amount of credit assistance per client assisted is approximately $175,000 each and for procurements over $130,000 each.

QUESTION:

How has this been combined between private and public financing mechanisms? Do you ever work in conjunction with small business development loans or EDA assistance in assisting your client?

ANSWER:

For 1985, nationwide financing assistance to clients is as follows:

Private Financings	83.95%
Public Financings	15.30%
Combination Financings (Minority Enterprise Small Business Investment Company's)	.75%
	100.00%

MBDA clients have received small business development loans and the Agency has worked with EDA in developing minority businesses in economically distressed areas.

Questions for the Record by Congressman Bob Carr

Use of Community Based Organizations Versus Big 8 Accounting Firms

QUESTION:

Is there an effort on the part of MBDA to replace minority community based business development organizations with big 8 accounting firms? How many big 8 firms have been contracted out by MBDA?

ANSWER:

No, there is no planned effort on the part of the Minority Business Development Agency (MBDA) to replace minority community based business development organizations with big 8 accounting firms.

MBDA competitively selects and funds approximately 100 organizations to provide management and technical assistance to minority clients located throughout the country. The competitive solicitation is sought through requests published in the Federal Register and/or the Commerce Business Daily. MBDA funds its Minority Business Development Centers (MBDCs) through the cooperative agreement funding mechanism.

Those eligible to receive a MBDC award include individuals, non-profit organizations, for profit firms, local and state governments, American Indian Tribes, and educational institutions. This process is open to both minority and non-minority firms. In order to fund organizations that would provide the highest level of quality assistance to minority clients, those firms/individuals were chosen which had the greatest strength in the following areas:

1. Capability and experience of firm/staff
2. Techniques and methodology to accomplish program goals
3. Resources available (technical and administrative)
4. Costs

Only one (1) Big 8 firm has been funded by MBDA. Price Waterhouse won nine (9) awards in nine (9) cities in FY 1984. None have been awarded since then.

Those locations receiving Price Waterhouse awards in FY 1984 were Salt Lake City; Cincinnati; Columbus, Ohio; Dayton; St. Louis; Bakersfield; Stockton; Tucson; and Sacramento.

QUESTION:

Since 1984, within the Chicago Region, how many minority community based organizations have lost their contracts/awards and who were they replaced by?

ANSWER:

Between 1984 and the present, only three (3) minority or community based organizations within the Chicago Region have not had their MBDA contracts renewed. The Chicago Economic Development Corporation was replaced by David J. Burgos and Associates, a minority firm for one of the two Chicago BDCs. The Detroit MBDC award operated by Southeastern Michigan expired on March 31, 1986. The recommended replacement is pending. The Flint BDC, formerly operated by Flint Community Development Corporation, was consolidated with the Detroit BDC.

QUESTION:

Since you have been the Director of MBDA, how many minority community based organizations have lost their contracts and how many were replaced by other minority community based organizations and Big 8 accounting firms — nationwide?

ANSWER:

As of March 1986, 22 minority community based organizations lost their awards; 11 minority community based organizations were replaced by other minority community based organizations; no minority community based organizations were replaced by a Big 8 accounting firm.

QUESTION:

Why was it that last year, due to late funding and carryover of awards, that certain minority community based organizations had to layoff staff and close their doors and some go out of business when, at the same time, the Agency carried over to this fiscal year about $11 million in program funds? How many of those minority community based organizations that had to cease operations have been replaced by accounting firms?

ANSWER:

MBDA's awards are made for periods of one (1) year, except when an organization is closed down for poor performance or non-performance or when no qualified organization can be found to service an area. Last year, only $2.7 million of the carryover was attributed to Business Development Centers. A total of $6.3 million represented funds for trade associations, chambers of commerce, and special projects; and $2 million was from prior year funds recovered in the last two (2) months of the fiscal year.

As of March 1986, five (5) accounting firms, other than Big 8 accounting firms, have replaced minority community based organizations which had to cease their operations.

TUESDAY, MARCH 18, 1986.

UNITED STATES TRAVEL AND TOURISM

WITNESSES

DONNA F. TUTTLE, UNDER SECRETARY FOR TRAVEL AND TOURISM

DAVID L. EDGELL, DIRECTOR, OFFICE OF POLICY AND PLANNING

JERRY MANOLATOS, DIRECTOR, OFFICE OF MANAGEMENT AND ADMINISTRATION

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER. The next agency whose budget we will review is that of the United States Travel and Tourism Administration. Here to testify is the Honorable Donna Tuttle, the Under Secretary for Travel and Tourism.

The 1987 budget request is for $4,023,000, which represents a decrease of $7,461,000 below the 1986 adjusted appropriation level of $11,484,000. The 1986 Gramm-Rudman sequestration totalled $516,000.

At this point we will insert the justifications in the record.

[The justifications follow:]

DEPARTMENT OF COMMERCE
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION

Budget Estimates, Fiscal Year 1987
Congressional Submission

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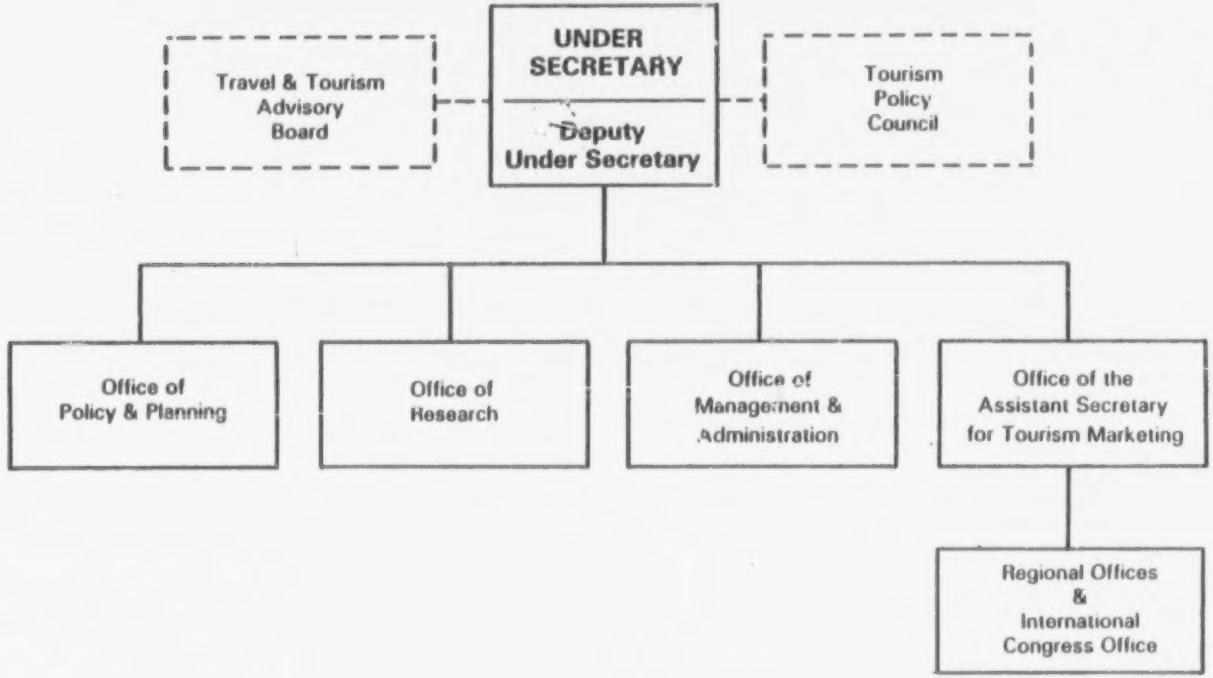
Congressional Submission

February, 1986

U.S. Department of Commerce

UNITED STATES TRAVEL AND TOURISM ADMINISTRATION


UNDER SECRETARY
Deputy Under Secretary
Travel & Tourism Advisory Board
Tourism Policy Council
Office of Policy & Planning
Office of Research
Office of Management & Administration
Office of the Assistant Secretary for Tourism Marketing
Regional Offices & International Congress Office

USTTA-1

General Statement

The overall goal of the United States Travel and Tourism Administration (USTTA), as outlined in the National Tourism Policy Act, is to plan, develop, and carry out an international tourism marketing program designed to stimulate and encourage travel to the United States by residents of foreign countries.

The FY 1987 request of $4,023,000 provides funding for the phase out of the United States Travel and Tourism Administration (USTTA) by September 30, 1987. Some tourism promotion activities are already performed by private, State, and local tourism organizations. These organizations can assume additional functions when USTTA is phased out. The following is a comparison of the FY 1986 appropriation with the FY 1987 estimate and related data on current employment.

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc. (+) or Dec.(-)		Perm. Emp. 12/31/85
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Salaries and expenses....................................	80	$12,000	29	$4,023	-51	-$7,977	74

Justification of Proposed Language Changes

1. After the word "expenses" insert "to close out" and delete the word "of".

2. Delete the balance of text after the word "Administration...$12,000,000" insert "$4,023,000".

The deletion of this language reflects the termination of the USTTA program in FY 1987.

Appropriation Language and Code Citations

1. "For necessary expenses to close out the United States Travel and Tourism Administration."

22 U.S.C 2121-2127

22 U.S.C. 2121-2127 provides that "...the Secretary of Commerce shall...develop, plan and carry out a comprehensive program designed to stimulate and encourage travel to the United States by residents of foreign countries..."

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Page No.	Summary of Adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			80	$12,000
	1987 base			80	12,000

Comparison by activity:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Perm. Pos.	Inc.(+) or Dec.(-) Amount
USTTA-6 International tourism development	66	$10,363	68	$10,741	68	$10,741	22	$3,600	-46	-$7,141
USTTA-15 Executive direction	12	1,169	12	1,259	12	1,259	7	423	-5	-836
Change									-51 (-51)	-7,977
Total requirements	78 (73)	11,532 (11,522)	80 (80)	12,000	80 (80)	12,000	29 (29)	4,023		

Note: Permanent position amounts in parentheses represent workyears. Dollar amounts in parentheses represent obligations.

Justification of Program and Performance
(Dollar amounts in thousands)

Activity: Tourism
Subactivity: International tourism development

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
International tourism development........	66	$10,355	68	$10,741	68	$10,741	22	$3,600	-46	-$7,141

Goals and Objectives

The mission of the United States Travel and Tourism Administration (USTTA) as outlined in the National Tourism Policy Act is to carry out an international tourism marketing program designed to stimulate and encourage travel to the United States by residents of foreign countries.

The agency's goals are: (1) Expand U.S. public and private sector tourism organizations' marketing efforts abroad; (2) increase U.S. tourism exports and the U.S. share of the international travel market; (3) reduce the nation's travel deficit; (4) provide accurate and timely information and services to U.S. travel trade exporters; and (5) reduce barriers to travel.

The program objectives of USTTA in FY 1986 are to: (1) Develop and implement integrated marketing campaigns abroad and seek outside cooperative advertising contributions from public and private sector organizations; (2) initiate long-term cooperative marketing programs to be funded at 80 percent by 420 outside organizations; (3) conduct support programs in nine USTTA major market countries by responding to 410,000 consumer inquiries and 145,000 trade inquiries; provide 35,000 shipments of information materials to travel outlets; assist 60 travel missions; and make 30,000 trade contacts; (4) develop international marketing plans for two U.S. regions; (5) motivate 20 U.S. Convention and Visitors Bureaus to initiate or expand their marketing efforts to attract 40 new international congresses to be held in their venues; (6) develop and provide accurate, timely data on travel necessary to guide planning in the public and private sectors; (7) evaluate the impact and relative effectiveness of USTTA promotional programs; (8) reduce foreign and domestic impediments to inbound and outbound tourism through legislation, bilateral and multilateral negotiations, and airport facilitative programs; and (9) provide tourism policy coordination through the Tourism Policy Council and legislated State tourism policies.

USTTA will employ three core strategies as a means of developing its major marketing programs and campaigns. A major campaign is defined as a fully integrated promotional effort aimed at a major consumer target group, a major product area or region, or a major seasonal activity. The marketing mix for a campaign includes sharply focused efforts in cooperative advertising, journalist familiarization tours, travel missions, road shows, media events, and travel trade training workshops and seminars.

The three strategies are:

(1) Initiate cooperative promotional campaigns in key foreign tourism markets to cause states, cities, and the tourism industry to market their products abroad, and to motivate prospective foreign tourists to travel to the United States.

(2) Initiate long-term tourism development programs in key foreign tourism markets to educate and inform the travel trade and prospective visitors about possibilities for travel to the United States.

(3) Conduct support programs for conveying public and private materials to the trade and consumers in key foreign markets.

In developing its marketing programs and campaigns, USTTA follows well-established principles and procedures for marketing planning. The first step in this process is a situation analysis -- an assessment of factors influencing the effectiveness of promotional efforts abroad. This assessment involves study of past, present, and expected market performance and tourist travel patterns; the competitive environment in the target country; the changing economic conditions affecting market demand; and the characteristics and travel patterns of consumer segments.

Specific goals and objectives are then set in the planning process for the USTTA marketing effort. Methods for achieving these goals and objectives are identified and evaluated. The most appropriate methods are selected, and individual marketing tactics are formulated for reaching target markets. Priority is given to markets which have the greatest potential for incremental market penetration through the promotional activities of the U.S. travel industry.

The marketing tactics employed in foreign markets are based on decisions concerning several interdependent marketing plan components: (1) Developing a definition of the U.S. tourism "product" to be promoted, including message and image; (2) selecting the tools for presenting the product -- the sales force, distribution channels, cooperative advertising media, sales promotion techniques, and media relations; and (3) establishing support services, including marketing research, developing cooperative advertising relationships, personnel development, and collateral promotional materials.

1986 Program

In FY 1986, USTTA will maintain: Regional Offices, staff, and marketing programs in the nine countries that produce 82 percent of the international visitors to the U.S. and 72 percent of foreign tourism earnings; special market programs conducted in 14 other countries in cooperation with the Foreign Commercial Service of the International Trade Administration; and an International Congress Office in Paris to attract international conventions to the United States. Agency direction and management, including policy and planning, research, marketing support, executive direction and administration will be provided from Washington, D.C. Marketing activities will consist of major promotional campaigns specific to each market involving partnerships with U.S. and foreign private sector organizations. The program will include cooperative advertising, consumer and trade information, product information, familiarization tours, seminars, trade shows and travel missions, multilingual receptionist programs, and the production, storage, and distribution of limited locally-produced informational materials. The USTTA research program will continue to collect and provide marketing intelligence and consumer research information for marketing planning purposes, as well as develop expanded evaluation data measuring the effectiveness of USTTA's marketing programs.

Policy activities will include providing forums for interagency cooperation in tourism and participating in international tourism policy meetings. Policy documents outlining and responding to tourism initiatives will be prepared together with a model for legislated State tourism policies.

REGIONAL OFFICE OPERATIONS (FTE 51; $3,843,000)

USTTA maintains nine Regional Offices abroad, located in central metropolitan locations for each market. The offices implement the strategies to conduct USTTA campaigns and other marketing programs. Each Regional Office has a VISIT USA Committee, consisting of U.S. and/or foreign tourism organizations represented in the country. The committee meets on a regular basis to offer counsel, advice and assistance in planning U.S. travel promotions and to participate in cooperative promotional campaigns.

Regional Offices also operate special market programs in 14 other countries in cooperation with the U.S. and Foreign Commercial Service and local travel trade or VISIT USA Committees. These programs involve technical assistance and training for the travel trade to increase effectiveness in selling the U.S. travel product. The 14 special market countries are Venezuela, Switzerland, Spain, Belgium, Denmark, Norway, Sweden, Finland, Austria, Taiwan, Hong Kong, South Korea, Singapore, and New Zealand.

In addition to the Regional Offices, USTTA maintains an International Congress Office in Paris. The primary function of this office is to solicit the international congress business of international associations, a majority of which are headquartered in four European cities: Brussels, London, Geneva, and Paris. By maintaining a physical presence in the American Embassy in Paris, USTTA is able to provide liaison between these organizations and the U.S. communities and their business and convention bureaus.

COOPERATIVE PROMOTIONAL CAMPAIGNS ($2,458,000)

USTTA will concentrate efforts to develop and conduct one or more major cooperative promotional campaigns. These campaigns provide a vehicle for private, State and local organizations to get increasingly involved in the market. Integrated marketing campaigns are aimed at a major strategic target, a major product area or region, and/or a major seasonal activity. The marketing mixes for campaigns include focused efforts on cooperative advertising, journalist familiarization tours, travel missions, road shows, media events, and travel trade workshops and seminars. Campaigns also involve services and organizations such as car rental services, States, cities, attractions, regional tourism groups, accommodation services, air and ground carriers, food services, and chambers of commerce. Focused campaigns provide measurement opportunities such as actual bookings and advertising coupon conversions.

LONG-TERM COOPERATIVE MARKETING PROGRAMS ($594,000)

USTTA initiates programs with private, State and local tourism organizations in key foreign markets to build long-term interest and capability in promoting travel to the United States. Activities include educational/training seminars and workshops in the marketplace and travel missions by groups representing specific U.S. destination areas. These activities are funded at least 80 percent by tourism organizations. These programs increase consumer interest in travel to the U.S. and lead to the development of new travel products.

SUPPORT PROGRAMS ($1,604,000)

Regional Offices are staffed by trained tourism marketing specialists and information counselors. These individuals provide support services for the implementation of programs to educate and motivate the foreign-based wholesale and retail industry to sell the United States as a destination. They provide informational materials and services to individual consumer prospects, and stimulate demand for the U.S. tourism product by means of selective media information programs.

RESEARCH ($1,000,000)

USTTA gathers, analyzes, and provides comprehensive data on international travel to be used by public and private sector tourism marketing and policy planners. The USTTA research program is designed to address existing data needs and to assess marketing program impact and effectiveness. Major components of the research program include:

In-Flight Survey of International Air Travelers - $410,000
Initiated in FY 1982, the In-Flight Survey gathers marketing information from foreign travelers departing the United States. This system entails cooperative, in-kind support by 37 major international air carriers and is financed in part through user fees, subscriptions, and interagency funding. In FY 1986, approximately $85,000 is projected in financial support for this program from outside sources. Besides providing comprehensive analyses of visitor spending, the system will also be used to upgrade the Department's data on the U.S. international travel dollar accounts. Four quarterly national reports are issued to subscribers. Special data analyses and user tapes will be provided to major sponsors and individual purchasers as required.

Marketing Program Evaluation Studies - $150,000
Marketing Program Evaluation Studies will track and assess the effectiveness and impact of USTTA marketing programs, using analytical studies and detailed reporting procedures. This effort will include pre- and post-campaign consumer surveys, coupon conversion studies, tracking of changes in visitation patterns of specific target market groups, and follow-up surveys of trade show and seminar attendees.

Mexican Border-Crossing Survey - $150,000
With the Mexican government, USTTA will jointly sponsor an ongoing Mexican Border-Crossing Survey, which gathers basic statistical data on Mexican land border-crossers. Existing INS statistical reporting systems are incapable of providing periodic tabulations on the volume, characteristics, or economic impact of Mexican tourists visiting the U.S. by land transportation in the border area. Consequently, several million visitors are omitted annually from U.S. foreign visitor counts. The USTTA-Mexican government monthly surveys at selected border-crossing points will correct this deficiency in the Federal data base.

Foreign Visitor Arrival Statistics - $65,000
Monthly reports of reprogrammed INS data on non-immigrant arrivals will be prepared and issued to paying subscribers quarterly. Using monthly data provided by the INS, non-immigrant arrivals to the United States will be analyzed in terms of the volume of visitors by country of residence, port of entry, mode of transport, and type of visa. These data provide base-line measurement on the inflow of foreign tourism to the United States. USTTA reports will be issued on a subscription basis through the NTIS.

Consumer Surveys - $200,000
In-Country Consumer Surveys will be conducted in Japan, United Kingdom, Germany, France and the Nordic countries. The studies will establish U.S. competitive positioning, potential travelers' characteristics, prime target market segments, and their images, attitudes, and international travel preferences. Data from these surveys will guide development of private, State and local cooperative promotional programs in these countries.

Econometric Forecasting Model - $10,000
An econometric model to forecast inbound travel will be updated and operated. This model will quantitatively link changes in international tourism flows to changes in independent economic variables -- those which influence tourism consumption -- enabling USTTA to objectively project foreign tourism demand from major market countries, based on available economic forecasts.

Economic Impact Study - $15,000
A study to assess the distribution and impact of foreign visitor expenditures on U.S. national, regional, and State economies will be updated for CY 1985/1986. Information provided by this study will assist in convincing potential cooperative partners in the U.S. tourism industry to become increasingly involved in promoting inbound tourism.

POLICY

USTTA tourism policy initiatives involve efforts to increase tourism to the United States through removal of government-imposed impediments to international travel flows and coordination and establishment of government policy relating to travel and tourism development and facilitation. In this capacity, USTTA interacts with the travel trade, other governmental policy offices, intergovernmental bodies, and international organizations. USTTA represents the Department as an official participant in bilateral and multilateral negotiations to reduce or eliminate impediments to tourism. Such obstacles act as non-tariff trade barriers, hamper U.S. travel industry access to foreign travel markets, and interfere with freedom of movement. Major impediments to tourism currently imposed by foreign governments include exchange controls which limit the amount of currency a national may purchase for travel abroad; departure taxes; excessive passport fees; non-interest-bearing bank deposit requirements for nationals seeking to travel abroad; and exit visas.

USTTA will seek to reduce foreign and domestic impediments to U.S. international tourism through legislation, bilateral and multilateral negotiations, and airport facilitation programs. The agency will provide policy coordination through the Tourism Policy Council to: (1) coordinate the policies and programs of Federal agencies that have a significant effect on tourism, recreation, and national heritage preservation; (2) develop areas of cooperative program activity; (3) assist in resolving interagency policy and program conflicts; and (4) seek and review concerns of the U.S. private travel industry and State and local governments relative to Federal policies and programs deemed to conflict with the orderly growth and development of tourism. USTTA will also encourage States to adopt tourism policies to attract foreign visitors to the United States.

MULTILINGUAL RECEPTIONIST ($255,000)

USTTA operates a multilingual receptionist program at 12 major U.S. airports to provide welcome and interpreting service to non-English speaking international arrivals. The receptionists are stationed in Federal inspection areas and work closely with the Immigration and Naturalization Service, the Customs Service and the Department of Agriculture to expedite the entry of foreign visitors.

HEADQUARTER'S STAFF SUPPORT (FTE 17; $987,000)

Marketing Staff - FTE 8; $452,000

Based on international tourism policies approved by the Under Secretary, the Office of the Assistant Secretary for Tourism Marketing is responsible for the development of marketing policy guidelines, the formulation and implementation of an annual marketing plan, and the supervision and tracking of Regional Office performance. It establishes working relationships with U.S. private, State and local tourism groups which allow the agency to enlist domestic U.S. cooperative advertising partners, provide technical assistance and training to the U.S. travel trade, and to hold joint Government/industry/State/city conferences aimed at communicating and coordinating U.S. promotional programs in key foreign markets. The Assistant Secretary's office oversees the development of cooperative advertising programs to ensure the maintenance of sufficient standards in the promotional messages placed in the foreign markets. The Office also develops marketing plans and recommendations for selected U.S. regional tourism destination areas to encourage and guide increased involvement in the agency's marketing efforts abroad. These recommendations and guidelines are delivered through U.S. travel industry-sponsored seminars.

Research Staff - FTE 5; $281,000

The Office of Research provides staff support and develops economic and marketing data required for program planning and evaluation in the public and private sector; assists in the strategic planning process of the agency; develops original and secondary market analyses in direct support of Departmental and agency objectives and strategies; provides planning input for, undertakes necessary research in support of, and advises on the direction and content of marketing programs contained in the Regional Marketing Plans; carries out tracking and periodic evaluation studies to assess the relative effectiveness of marketing activities; forecasts trends in U.S. international tourism; provides specialized information and ad hoc analyses as required; maintains a data bank of international travel information; and services over 5,000 travel industry requests for technical assistance and research information each year.

Policy Staff - FTE 4; $254,000

The Office of Policy provides support to the Under Secretary in the development of domestic and international tourism policies; legislative initiatives; and planning functions, including preparation of position papers on tourism issues and legislative proposals and related analyses, comments, and testimony. It provides staff support to the Tourism Policy Council and the Travel and Tourism Advisory Board including the preparation and distribution of their annual reports as required by law.

The Office interacts with other governmental policy offices, intergovernmental bodies, international organizations and the travel trade,. It also develops policy and planning strategies in the area of international travel and tourism agreements, and represents the Department as an official participant in bilateral and multilateral negotiations to reduce or eliminate impediments to tourism. The Office identifies policy options to improve the market climate in which the U.S. travel industry must operate by encouraging regions, States, and cities to become more active in the international tourism marketplace. This is done by reviewing the tourism impact of legislation proposed by Federal agencies or by outside interest groups and assessing regulations proposed or implemented by foreign governments or by other agencies of the U.S. Government.

Summary of Performance Data

Performance indicators are as follows:

	1984 Actual	1985 Estimate	1986 Estimate	1987 Estimate
No. cooperative advertising partners	N/A	414	1,100	...
Cooperative advertising partners' contributions	N/A	$1.4 million	$7.3 million	...
Est. no. visitors generated by cooperative ad campaigns.	N/A	10,000	67,900	...
Est. tourism $ from coop. ad campaign-generated visitors	N/A	$19.9 million	$50 million	...
No. cooperative marketing program partners	N/A	420	420	...
Cooperative marketing program contribution	N/A	$1.7 million	$1.7 million	...
No. U.S. convention/visitors bureaus brought into foreign market promoting U.S. congress venues	N/A	20	20	...
No. congresses/conventions sold for U.S. venues	41	40	40	...
No. foreign convention attendees	37,350	50,000	30,000	...
Est. tourism earnings from foreign convention attendees.	N/A	$50 million	$34.1 million	...
Est. advertising value of media space generated	$104 million	$110 million	$110 million	...
No. journalists on familiarization tours	1,165	1,130	1,200	...
No. travel agents on familiarization tours	470	380	400	...
No. travel literature shipments to sales outlets	37,926	34,400	35,000	...
No. consumer inquiries serviced	398,700	404,000	410,000	...
No. trade inquiries serviced	134,084	142,000	145,000	...
No. trade shows organized	29	32	35	...
No. trade contacts/sales calls made	28,584	29,500	30,000	...
No. U.S. ports serviced by receptionist program	13	13	13	...
No. educational/training workshops & seminars held	106	106	110	...
No. foreign trade attendees at workshops/seminars	9,825	10,075	10,500	...
No. U.S. travel missions assisted	41	55	60	...
No participants on travel missions	704	685	700	...
No. subscriptions and co-sponsors to in-flight survey	65	100	125	...
No. research reports issued	271	300	350	...
No. research/information requests serviced	5,000	5,000	5,000	...
No. major policy papers prepared	15	20	25	...
No. interagency tourism policy initiatives developed	4	6	8	...
No. international tourism policy meetings attended	3	4	5	...
No. bilateral/multilateral tourism agreements initiated.	2	3	4	...

Decreases for FY 1987
(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
International tourism development	68	$10,741	22	$3,600	-46	-$7,141
	(68)		(22)		(-46)	

The Administration proposes to phase out the USTTA program in FY 1987, since its functions can be performed by private, State and local tourism organizations. The budget requests a decrease of 68 positions (46 FTE) and $7,141,000 from the FY 1986 appropriation in the International Tourism subactivity. This funding level would provide necessary severance pay and other expenses to shut down programmatic operations and close all foreign offices.

The object class detail for this decrease follows:

	Positions	Amount
Full-time permanent	-46	-$1,229
Other than full-time permanent	...	-8
Other personnel compensation	...	-4
Total, personnel compensation	-46	-1,241
Personnel benefits		-395
Benefits for former personnel		+1,249
Travel and transportation of persons		-216
Travel and transportation of things		+262
Communications, utilities and miscellaneous charges		-670
Printing and reproduction		-699
Other services		-5,320
Supplies and materials		-46
Equipment		-65
Total		-7,141

Justification of Program and Performance

(Dollar amounts in thousands)

Activity: Tourism
Subactivity: Executive direction

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Executive direction......................	12	$1,167	12	$1,259	12	$1,259	7	$423	-5	-$836

Goals and Objectives

The goal of USTTA Executive direction is to effectively direct and administer the Agency's efforts to increase international tourism to the United States. The objectives of this function are to: (1) develop and implement managerial policies; (2) provide strategic and tactical direction to USTTA marketing, research, and policy programs; (3) provide effective administrative support of agency operations; and (4) represent USTTA to Congress, Federal agencies and other governmental and private sector organizations.

1986 Program

USTTA's Executive direction is provided by the Office of the Under Secretary and the Office of Management and Administration. Together these offices provide strategic and administrative guidance and support to Headquarters and foreign operations. Resources required for centralized services are provided for in this subactivity.

HEADQUARTERS STAFF (FTE 12; $584,000)

Office of the Under Secretary FTE 8; $422,000
The Under Secretary of Commerce for Travel and Tourism, the principal spokesperson on the development of Federal tourism policy and programs, is responsible for the management and leadership of USTTA. The Under Secretary exercises the duties and responsibilities of the Secretary under the International Travel Act of 1961, as amended by the National Tourism Policy Act of 1981, and other authorities as delegated by the Secretary. The Under Secretary provides leadership at the national level to focus the attention and efforts of private, State and local tourism officials on increasing the numbers and spending of foreign tourists to the United States.

The Under Secretary for Travel and Tourism is responsible for directing USTTA activities; Executive Branch coordination; regional/State/city/industry/intergovernmental coordination and liaison; public relations activities; and Travel and Tourism Advisory Board activities.

The Under Secretary is assisted principally by the Deputy Under Secretary for Travel and Tourism and the Assistant Secretary for Tourism Marketing. The Deputy Under Secretary performs the functions of the Under Secretary in the latter's absence.

Office of Management and Administration - FTE 4; $162,000

The Office of Management and Administration serves as the primary administrative arm of the Office of the Under Secretary and the Assistant Secretary for Tourism Marketing. The office is responsible for the effective operation of USTTA's financial and personnel management programs. The office advises and assists in the development of overall policies in the areas of management and administration, including administrative support services, contract negotiations and administration, personnel, budgeting, and financial management. The office also serves as the Under Secretary's primary representative to the Offices of the Assistant Secretary for Administration and General Counsel, as well as liaison with the Office of Legislative Affairs in dealing with budgetary matters.

CENTRALIZED SERVICES FTE ...; $675,000

Centralized services consist of requirements such as accounting, personnel, and administrative support furnished by the Department of Commerce to USTTA offices located in Washington, and for single billing charges that are paid centrally. These services include GSA space rental, postal charges to USPS, telephone services, FTS, equipment rental, general administrative printing, office supplies, ADP services and equipment.

Decreases for FY 1987
(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Executive direction....................................	12	$1,259	7	$423	-5	-$836
	(12)		(7)		(-5)	

The Administration proposes to terminate the USTTA program in FY 1987, since its functions can be performed by private, State and local tourism organizations. The budget requests a decrease of 12 positions (6 FTE) and $836,000 from the FY 1986 appropriation in the Executive Direction subactivity. This amount is sufficient to shut down operations by September 30, 1987 and provide necessary severance pay and other expenses.

The object class detail for this decrease follows:

	Positions	Amount
Full-time permanent	-7	-$172
Other than full-time permanent	...	-12
Other personnel compensation	...	-2
Total, personnel compensation	-7	-186
Personnel benefits		-24
Benefits for former personnel		+20
Travel and transportation of persons		-35
Travel and transportation of things		-24
Communications, utilities and miscellaneous charges		-240
Printing and reproduction		-18
Other services		-279
Supplies and materials		-12
Equipment		-38
Total		-836

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp.
Object Class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
11 Personnel compensation:										
11.1 Full-time permanent positions........................	80	78	$2,722	29	29	$1,321	-51	-49	-$1,401	74
11.3 Positions other than full-time permanent............	...	2	27	...	...	7	...	-2	-20	...
11.5 Other personnel compensation........................	...	...	6	...	...	...	...	...	-6	...
Total personnel compensation........................	80	80	2,755	29	29	1,328	-51	-51	-1,427	74
Other objects:										
12.1 Personnel benefits civilian..........................			562			143			-419	
13.0 Benefits for former personnel........................			...			1,269			+1,269	
21.0 Travel and transportation of persons................			336			85			-251	
22.0 Transportation of things............................			102			340			+238	
23.1 Standard level user charges..........................			150			40			-110	
23.3 Communications, utilities, and miscellaneous charges			1,000			200			-800	
24.0 Printing and reproduction...........................			767			50			-717	
25.0 Other services......................................			6,167			568			-5,599	
26.0 Supplies and materials..............................			58			...			-58	
31.0 Equipment...			103			...			-103	
Total requirements..................................			12,000			4,023			-7,977	

Justification by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Object Class	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp. 12/31
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11.1 Full-time permanent positions										
Executive level III	1	1	$74	1	1	$18	...	...	-$56	1
Senior executive service	4	4	265	1	1	181	-3	-3	-84	4
General schedule	44	42	1,788	20	20	973	-24	-22	-815	41
Foreign service nationals	31	31	595	7	7	149	-24	-24	-446	28
Total, permanent positions	80	78	2,722	29	29	1,321	-51	-49	-1,401	74
11.3 Positions other than full-time permanent	...	2	27	...	...	7	...	-2	-20	
11.5 Other personnel compensation			6			...			-6	
12.1 Personnel benefits										
Civil Service Retirement			200			69			-131	
Federal Insurance Contribution Act (FICA)			38			9			-29	
Health insurance			45			10			-35	
Life insurance			18			2			-16	
Employees' compensation			4			4			...	
Overseas allowance			257			49			-208	
Total, personnel benefits			562			143			-419	
13.0 Benefits for former personnel			...			1,269			+1,269	
21.1 Travel and transportation of persons										
Per diem			176			35			-141	
Air fare			121			50			-71	
Other common carrier			30			...			-30	
GSA motor vehicles			4			...			-4	
Mileage for privately owned vehicles			5			...			-5	
Total, transportation of persons			336			85			-251	

	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp.
Object Class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
22.0 Transportation of things			$102			$340			+$238	
23.1 Standard level user charges			150			40			-110	
23.2 Communications, utilities, and miscellaneous charges										
Federal Telecommunications Systems			33			5			-28	
Other telephone, telegraph and teletype utilities			267			25			-242	
Other space rental			547			134			-413	
Postal services by USPS			50			15			-35	
Postal by other countries			75			15			-60	
Office copying equipment			10			2			-8	
Other equipment rental			18			4			-14	
Total, communications, utilities, and miscellaneous charges			1,000			200			-800	
24.0 Printing and reproduction			767			50			-717	
25.0 Other services										
Centralized departmental services			300			198			-102	
Other services			5,867			370			-5,497	
Total, other services			6,167			568			-5,599	
26.0 Supplies and materials										
Office supplies and materials			58			...			-58	
31.0 Equipment			103			...			-103	

United States Travel and Tourism Administration
Salaries and expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$24	$41	...
Management and professional services	...	...	...
Special studies and analysis	...	...	...
Management and support services for research and development	...	...	...
Amount withheld from obligation pursuant to P.L. 99-190	...	-4	...
Total	24	37	...

Consulting Services:

In FY 1986, consulting services will be used to provide expert advice and counsel on developing effective on-going procedures for contacting and soliciting financial support from the tourism industry for cooperative advertising programs. Advisory committees are used to advise the Secretary of Commerce on the implementation of the National Tourism Policy Act.

In FY 1987 the Administration proposes to phase out the USTTA program since its functions can be performed by private, State and local tourism organizations.

UNITED STATES TRAVEL AND TOURISM ADMINISTRATION
Salaries and Expenses

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	...	...	...	...
Pamphlets	588	950	628	...
Audiovisuals	...	250	...	...
Total	588	1,200	628	...

In FY 1986, USTTA plans to complete printing of foreign language versions of a series of 12 information folders on the United States for use by prospective foreign visitors from abroad. The languages will be Spanish, French, German, Italian, and Japanese. Also, a new film covering the United States initiated in FY 1985 will be released for use in USTTA markets abroad to motivate foreign visitors to travel to the United States. In FY 1987 the Administration proposes to phase out the USTTA program since its functions can be performed by private, State and local tourism organizations.

United States Travel and Tourism Administration
Salaries and Expenses

Average Grades and Salaries

	1985 Actual	1986 Estimate	1987 Estimate
Average ES Salary	$66,232	$66,232	$66,232
Average GS Grade	11.73	11.82	...
Average GS Salary	$40,927	$41,250	$49,000
Average Salary of Ungraded Positions	$17,357	$19,194	$21,286

Mr. DWYER. Ms. Tuttle, do you have a statement that you would like to present at this time?

STATEMENT OF DONNA F. TUTTLE, UNDER SECRETARY OF COMMERCE FOR TRAVEL AND TOURISM

Ms. TUTTLE. I do, Mr. Chairman. Thank you very much.

I appear before you today in support of the President's fiscal year 1987 budget request of $4,023,000. The President's budget reflects a proposal to terminate authorization for the USTTA effective October 1st, 1986. The slightly more than $4 million requested in the budget is necessary for the close-out of USTTA overseas operations and to support a small staff in Washington, D.C. to complete the close-out efforts.

While we recognize that successful activities directed to the promotion of international travel to the United States contribute to the nation's economy and to the balance of trade, fiscal necessity requires that we establish priorities among the many claims on the funds provided by the general taxpayer. In response to the problem of a severe Federal deficit, the Administration has decided to reduce or eliminate taxpayer support for those programs that it believes can be better carried out by private industry. Moreover, we believe that the strongest contribution the Federal Government can make to the health of American industry is to create the conditions necessary for broad economic expansion.

The travel and tourism industry, as well as State and local governments, have been increasing their efforts in the international tourism marketplace. The Department will continue to encourage this by doing everything possible through legislation or deregulation to free private enterprise from the restraints imposed by Government.

I would be happy to respond to any questions you may have.

[Statement of Ms. Tuttle follows:]

STATEMENT BY THE UNDER SECRETARY OF COMMERCE
FOR TRAVEL AND TOURISM
DONNA F. TUTTLE
BEFORE THE HOUSE APPROPRIATIONS COMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE AND STATE, THE JUDICIARY AND RELATED AGENCIES

Mr. Chairman and Members of the Committee:

I appear before you today in support of the President's Fiscal Year 1987 budget request of $4,023,000. The President's budget reflects a proposal to terminate authorization for the USTTA, effective October 1, 1986. The slightly more than $4 million requested in the budget is necessary for the close out of USTTA overseas operations and to support a small staff in Washington, D.C., to complete the close out efforts.

While we recognize that successful activities directed to the promotion of international travel to the United States contribute to the Nation's economy and to the balance of trade, fiscal necessity requires that we establish priorities among the many claims on the funds provided by the general taxpayer. In response to the problem of a severe Federal deficit, the Administration has decided to reduce or eliminate taxpayer support for those programs that it believes can be better carried out by private industry. Moreover, we believe that the strongest contribution the Federal government can make to the health of American industry is to create the conditions necessary for broad economic expansion.

The travel and tourism industry as well as state and local governments have been increasing their efforts in the international tourism marketplace. The Department will continue to encourage this by doing everything possible through legislation or deregulation to free private enterprise from the restraints imposed by government. I would be happy to respond to any questions you may have.

CLOSE-OUT

Mr. **Dwyer**. We have your statement, and you agree with the close-out?

Ms. **Tuttle**. I do.

Mr. **Dwyer**. Do you think it's necessary to have an office to oversee the close-out here in Washington? Why not just close it out and lock the door and walk away and make a real contribution to the deficit?

Ms. **Tuttle**. I think because of the fact that there are nine overseas offices, it would require some staff to close out the activities in the overseas markets.

Mr. **Dwyer**. In what way? Give me an example of what activity would be required.

Ms. **Tuttle**. Well, in each one of the markets—and especially in Germany—we have several activities that you have to plan for ahead of time; for instance, trade shows and road shows. And we would want to find someone to take over that coordination that would already be planned for 1987.

Mr. **Dwyer**. Why find someone to take it over? Why not just close it out? It would be a very dramatic effort in connection with the deficit reduction.

Ms. **Tuttle**. Because with closing the agency in Washington, certainly that doesn't mean that we would like to stop the activities going on in the overseas market. The foreign commercial service officer would probably be an appropriate person to handle the trade show or some of the activities in the overseas markets.

Mr. **Dwyer**. Well, you've been discussing closing out the agency, now, for the last couple of years, if I remember correctly. Is that who's going to take it over, the foreign commercial officer?

Ms. **Tuttle**. Well, there have been no concrete plans made on this effort, but that certainly would be one of the feasibilities that certainly exists.

Mr. **Dwyer**. What's the minimum amount of office staff that you could use here in Washington to effect this closeout? Somewhat less than $4 million?

Ms. **Tuttle**. We would need the entire $4 million for the 12 member staff to close-out activities by September 30, 1987.

Mr. **Dwyer**. What's the status of your authorization for 1987?

Ms. **Tuttle**. We have no authorization. There is a bill pending in the Senate from last year, but we are not authorized.

Mr. **Dwyer**. You're not seeking the passage of that bill at this time?

Ms. **Tuttle**. No. No.

Mr. **Dwyer**. Thank you. We will have some questions to send over to you. You may submit the answers for the record.

[Questions for the record follow:]

QUESTIONS FOR THE RECORD BY CONGRESSMAN DWYER

Fiscal Year 1986 Activities

QUESTION:

How are you managing to sustain the reduction of $516,000 related to the Gramm-Rudman sequestration?

ANSWER:

The United States Travel and Tourism Admisnistration has taken the $516,000 Gramm-Rudman reduction out of both International Tourism Development activities ($462 thousand) and Executive Direction ($54 thousand). These reductions were spread across the board among the various USTTA activities.

QUESTION:

Are you having to induce furloughs or RIF's as a result of this reduction?

ANSWER:

No, the reductions were taken in non-personnel areas of the budget.

QUESTION:

Will you have to submit a reprogramming in order to minimize the effects on your programs and personnel as a result of the Gramm-Rudman sequestration?

ANSWER:

No, we have been able to accommodate the reduction without the need for reprogramming.

QUESTION:

Could you sustain a similar reduction in fiscal year 1987 should Congress provide the same level of funding as that provided in Fiscal Year 1986?

ANSWER:

Yes, the United States Travel and Tourism Administration could sustain a similar reduction based upon the same level of funding as that provided in fiscal year 1986.

Fiscal Year 1987 Activities

QUESTION:

At what point during the year will you begin to reduce your personnel levels without an appropriation higher than you have requested?

ANSWER:

The United States Travel and Tourism Administration would have to begin RIF procedures on October 1, 1986, and reduce personnel by December 31, 1986.

QUESTION:

That is, when will you begin to reduce the levels of personnel you have on board in 1986 pursuant to the approach proposed by your FY 1987 budget request?

ANSWER:

The United States Travel and Tourism Administration does not anticipate any need to reduce staffing levels in FY 1986. All reductions would occur in FY 1987.

QUESTION:

During fiscal years 1984 and 1985, United States tourism enjoyed the benefits of increased gains as a virtue of the value of the dollar against foreign currencies. What would you estimate the additionality provided to U.S. tourism as a result of these gains?

ANSWER:

The dollar increased substantially in value against most major foreign currencies in the early 1980s, peaking in March 1985. Its expanded purchasing power benefitted outbound U.S. travelers, while dampening growth in inbound tourism from foreign visitors. As a result, the 1985 tourism deficit increased 20% from 1984, and 55% from 1983. Although many other economic, political, and marketplace developments affect travel consumption, statistics show a general inverse relationship between the value of the dollar relative to foreign currencies and international tourism receipts and payments.

Reflecting this influence, inbound tourism from other countries declined 4.1% in 1984, with most major European markets experiencing contractions. Similarly, U.S. receipts from these visitors also dropped slightly (by 0.1% in current dollars). Conversely, Americans traveling abroad to all countries in 1984 jumped 10%. Americans traveling to overseas destinations, excluding Canada and Mexico, increased 20%. Their expenditures on foreign travel rose 16%. The resulting travel dollar deficit widened by 55% over the 1983 imbalance.

In 1985, inbound tourism was fairly flat compared with 1984, as the dollar continued to lose strength during the latter nine months of the year. U.S. receipts from international visitors rose 2% to $14.1 billion. Although final data are not yet available on outbound travel, it is estimated that payments by Americans abroad totaled $24.4 billion, up 9%. The travel dollar deficit therefore stood at $10.3 billion, a record level, up 20% over 1984.

In 1986 and 1987, the situation should be reversed. A much-weaker U.S. dollar should encourage increased levels of foreign visitation to this country while deterring growth in U.S. travel abroad.

QUESTION:

In what sectors of the business economy were these gains enjoyed the most?

ANSWER:

Since most of the gains experienced were concentrated in the outbound market, those sectors of the travel industry servicing Americans going abroad benefitted the most--primarily the travel agency business and international airlines. On the other hand, "lost" business was felt by many industry segments as a result of American traffic diverted to foreign destinations and weak performance of the inbound market.

QUESTION:

How well did the tours put together by your foreign offices, generate the benefits that were enjoyed by the American economy as a result of increased foreign tourism in the U.S.?

ANSWER:

USTTA regional offices abroad do not directly put tours together. Our offices work with the tour operators and wholesalers who create tour programs and itineraries which are then sold by retail travel agencies to the consumers in the marketplace.

A principal objective of USTTA is to increase the numbers of States, cities and Tourism Industry firms marketing their products internationally.

QUESTION:

What level of additionality can you attribute this overall level of increased tourism to your efforts apart from the dollar's increased value against foreign currency?

ANSWER:

Due to the loss of purchasing power of other major currencies against the U.S. dollar from 1980 to early 1985, travel to this country became much more expensive and therefore less competitively attractive from a cost point of view. Given this, visitation from our major European markets experienced declines, not increases, during the past three years.

In a concerted effort to determine the "cause-and-effect" of USTTA promotional programs, USTTA has undertaken a comprehensive set of evaluation research studies. These studies will assess the marginal impact of specific cooperative print media advertising placements on readers' decisions to visit the USA. Studies are currently underway in four USTTA markets, including assessment of the major test promotional campaign in West Germany. Results will be available in late summer of this year.

QUESTION:

Given the declining value of the dollar against foreign currencies, don't you feel that your efforts are more needed at this point rather not as indicated by the budget request?

ANSWER:

A major problem of the United States today is that many of the country's industries, states, and cities are not competing internationally for business. This problem existed in the past and can be expected to exist in the future. In recognition of this, the Department of Commerce has cited "increases in the number ... of exporters", increases in the share of the international travel market", and "increases in U.S. exports of ... services" as key goals Department agencies should work to attain.

Consistent with these goals, USTTA is carrying out cooperative international marketing programs designed to stimulate states, cities and U.S. companies to promote their products and services overseas. USTTA cooperative advertising programs alone attracted over $2.1 million from more than 100 tourism organizations in FY1 985.

It will be important in the future to continue to carry out the types of cooperative promotional programs which reflect a trade strategy in the export of travel and tourism. This should be carried out by industry, states and cities whether or not the agency exists.

QUESTION:

If the United States and other Western countries efforts are successful in devaluating the dollar, don't you feel that your efforts in promoting U.S. tourism which create increased revenues to the United States are needed more now than ever?

ANSWER:

As I stated before, the answer lies in increased international competition by U.S. firms and cooperative marketing programs.

QUESTION:

Do you feel that the efforts generated by your Administration more than outweigh the costs of maintaining your Administration in terms of revenues and other business revenues generated?

ANSWER:

Results of USTTA's coupon conversion studies will be available in late 1986 indicating the impact the agency's programs have had during the year.

QUESTION:

What would you estimate the total cost of business generated by your efforts in fiscal year 1986?

ANSWER:

As indicated in the previous answer, USTTA's evaluation research program will enable an objective evaluation of the impact, effectiveness, and business generated as a direct result of the agency's promotional programs in FY 1986. However, full results will not be available until late summer; therefore, we are unable to provide an answer to this question at this time.

QUESTION:

What would you estimate those benefits would be in terms of overall gross revenues and tax revenues for fiscal year 1987 if we maintained your 1986 level of appropriation activity?

ANSWER:

Since FY 1986 results cannot yet be determined until late summer, it is impossible to project benefits which would accrue in FY 1987.

QUESTION:

Do you have an authorization for fiscal year 1987 activities?

ANSWER:

At this time, no.

QUESTION:

What is the status of that authorization?

ANSWER:

An authorization (S-374) has been introduced by Senator Pressler.

QUESTION FROM CONGRESSMAN BOB CARR

Question:

Tourism as a consumer item was one of the few trade items which in 1984 showed a $900 million trade surplus in favor of the United States. It is believed that 1985's estimate will be $1 billion. Additionally, the Department of Commerce stated that in 1984, Japanese visitors, for example, spent $1.3 billion in the United States, while Americans spent only $400 million in Japan.

Does this Administration consider tourism as a trade item? If yes, why would they not support the legislative mandate of USTTA to promote tourism dollars here in the United States?

Answer:

The Administration does consider tourism to be an important item of international trade and a significant source of U.S. export revenue.

At the same time however, the Administration believes that the States, cities and private sector can efectively promote the United States in the international travel market, and that it is not essential that there be a Federal agency to do so.

TUESDAY, MARCH 18, 1986.

PATENT AND TRADEMARK OFFICE

WITNESSES

DONALD J. QUIGG, ASSISTANT SECRETARY AND COMMISSIONER FOR PATENTS AND TRADEMARKS

RENE D. TEGTMEYER, ASSISTANT COMMISSIONER FOR PATENTS

MARGARET M. LAURENCE, ASSISTANT COMMISSIONER FOR TRADEMARKS

BRADFORD R. HUTHER, ASSISTANT COMMISSIONER FOR FINANCE AND PLANNING

JAMES R. LYNCH, DIRECTOR, OFFICE OF BUDGET, PLANNING AND EVALUATION

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER. The next agency whose budget we shall review within the Department of Commerce is the Patent and Trademark Office. Here to testify is Donald Quigg, the Assistant Secretary for Patents and Trademarks.

The 1987 budget request for the Patent and Trademark Office is $109,632,000, which represents an increase of $28,574,000 above the 1986 adjusted appropriation. The 1986 sequestration as a result of Gramm-Rudman is $3,642,000. In addition, the Patent and Trademark Office has a pending deferral proposal. At this point we will insert the justifications in the record, and Mr. Quigg, you may present your statement at this point.

[The justifications follow:]

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

Budget Estimates, Fiscal Year 1987
Congressional Submission

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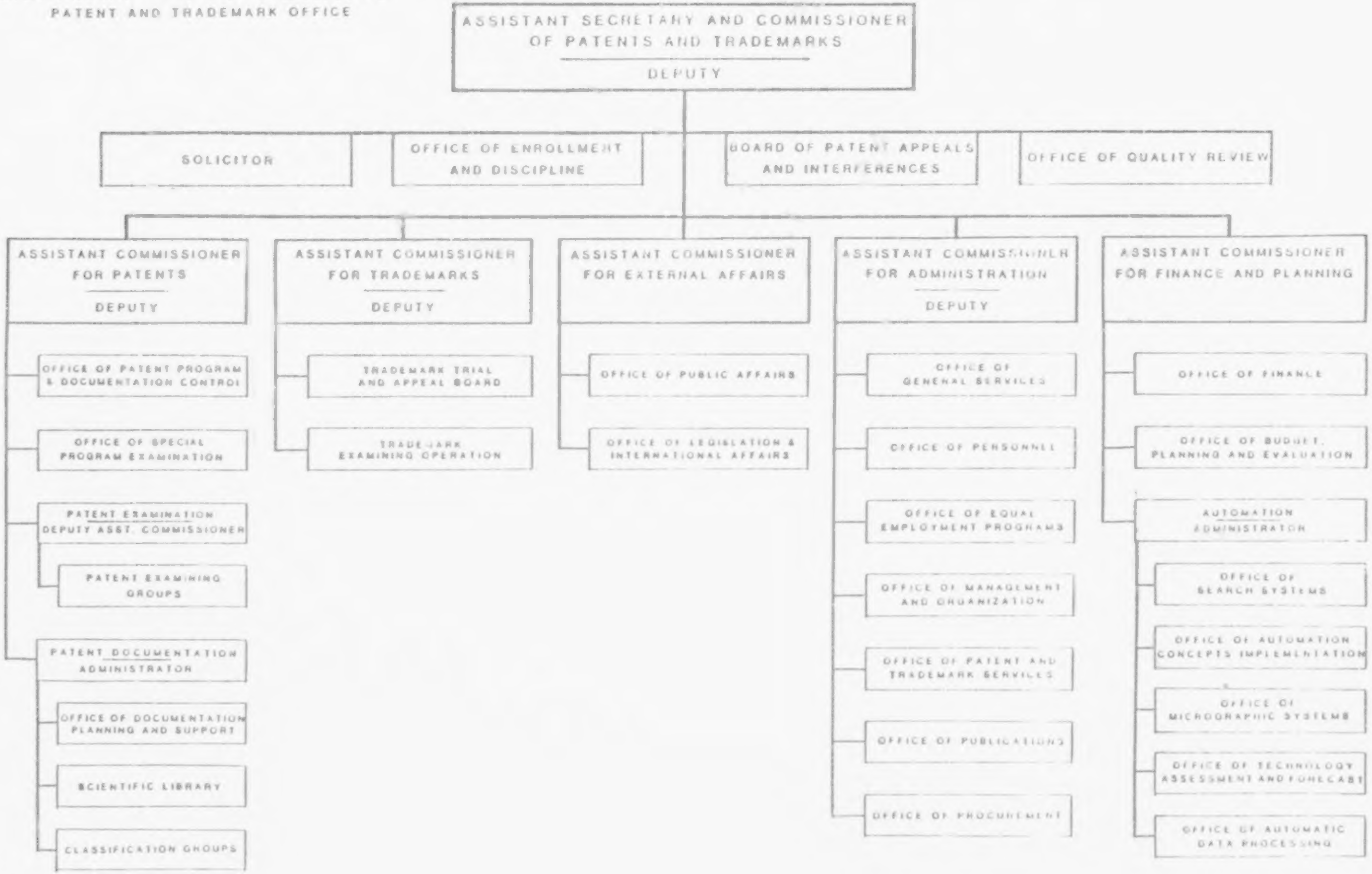
U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE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DEPUTY
SOLICITOR
OFFICE OF ENROLLMENT AND DISCIPLINE
BOARD OF PATENT APPEALS AND INTERFERENCES
OFFICE OF QUALITY REVIEW
ASSISTANT COMMISSIONER FOR PATENTS
DEPUTY
OFFICE OF PATENT PROGRAM & DOCUMENTATION CONTROL
OFFICE OF SPECIAL PROGRAM EXAMINATION
PATENT EXAMINATION
DEPUTY ASST. COMMISSIONER
PATENT EXAMINING GROUPS
PATENT DOCUMENTATION
ADMINISTRATOR
OFFICE OF DOCUMENTATION PLANNING AND SUPPORT
SCIENTIFIC LIBRARY
CLASSIFICATION GROUPS
ASSISTANT COMMISSIONER FOR TRADEMARKS
DEPUTY
TRADEMARK TRIAL AND APPEAL BOARD
TRADEMARK EXAMINING OPERATION
ASSISTANT COMMISSIONER FOR EXTERNAL AFFAIRS
OFFICE OF PUBLIC AFFAIRS
OFFICE OF LEGISLATION & INTERNATIONAL AFFAIRS
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OFFICE OF MANAGEMENT AND ORGANIZATION
OFFICE OF PATENT AND TRADEMARK SERVICES
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OFFICE OF PROCUREMENT
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OFFICE OF FINANCE
OFFICE OF BUDGET, PLANNING AND EVALUATION
AUTOMATION
ADMINISTRATOR
OFFICE OF SEARCH SYSTEMS
OFFICE OF AUTOMATION CONCEPTS IMPLEMENTATION
OFFICE OF MICROGRAPHIC SYSTEMS
OFFICE OF TECHNOLOGY ASSESSMENT AND FORECAST
OFFICE OF AUTOMATIC DATA PROCESSING

PTO-1

GENERAL STATEMENT

The Patent and Trademark Office (PTO) is charged with the mission of developing and administering both the patent and trademark laws of the United States and disseminating technological information disclosed in patents. The Office seeks to preserve the integrity of the U.S. patent system which promotes industrial and scientific progress and the Federal trademark system which promotes investment in business and protects consumers, thus strengthening the national economy.

Patent laws, which provide for granting inventors the right to exclude all others from making, using, or selling their inventions for 17 years, encourage technological and scientific advancement by providing incentives to create, invest in, and disclose new and useful ideas. PTO's primary role in administering these laws is to examine patent applications and grant protection for qualified inventions. In addition, PTO is responsible for collecting, assembling, publishing, and distributing technical information disclosed in patent grants and, by so doing, has created the world's largest scientific and technical reference library.

Trademark laws provide Federal registration and protection of names, symbols, or devices used by businesses to identify and distinguish goods and services offered to the public. Trademarks provide economic benefits by identifying the uniqueness, and integrity of the seller thereby reducing confusion of products and unfair competition. PTO examines trademark applications and grants Federal registration to owners of qualified marks.

Highlights of the 1987 budget submission to the Congress follow:

1. Continued progress in achieving the goal to reduce the time of patent application pendency to 18 months by 1987.

   The patent pendency reduction goal ("Plan 18/87") was initiated in FY 1982 and requires increased processing of patent applications each year until the end of 1987 when pendency will be reduced to 18 months. The 1987 budget request proposes a pendency time of 18.9 months, a reduction of 2.2 months from the 1986 goal of 21.1 months. In 1987, the Patent Examining Corps resources will decline, new patent examiner hires will be limited to critical attrition replacements only, and professional production will increase as prior year examiner hires progress along the learning curve. Pre-examination processing, printing support to the Examining Corps, and the Board of Patent Appeals and Interferences will be enhanced to respond to accelerated examiner production. Automated examiner search functions will be supported by the continued leasing of commercial data bases, initial operational deployment of in-house capability and the renovation of workstation areas.

2. Maintaining the time of trademark application pendency at three months to first action and 13 months to disposal (registration/abandonment).

   The trademark pendency reduction goals ("Plan 3/13") were achieved in 1985. Resource levels in 1987 will be used primarily to maintain the reduced pendencies and to realize the benefits from the automated system by enhancing the text editing and proofing of the document input into the data base. Initiatives for 1987 include further increases in the capabilities of the Automated Trademark System integrating the Search System with the TRAM 2 monitoring system.

The Trademark Trial and Appeal Board will be augumented to keep pace with the increased output of the Trademark Examination attorneys assuring continued responsiveness to the needs of the user community. The Automated Trademark Public Search Room established in 1986 to replace the existing paper search room will be run parallel to the paper file for 1987. This will insure that the needs of all concerned parties are adequately addressed before the paper file is eliminated.

3. Continued progress toward meeting the goal of automating the operations of the PTO by 1990.

The Automation Master Plan, mandated by Section 9 of P.L. 96-517, laid out a general blueprint to automate a majority of Office functions by 1990. The Plan was recently revised and updated and will be transmitted to the Congress via separate cover. The 1987 Automation initiatives reflect the directions established in the revised Plan. In 1984, PTO initiated the automation of the trademark process (T-SEARCH) and of the patent search process (Automated Patent System or APS) through contractual agreements. In 1985, the PTO completed T-SEARCH, continued the implemention of the APS in the pilot test of Examining Group 220, and initiated contracts and exchange agreements with the European and Japanese Patent Offices to capture the patent data base (Data Input/Output Systems or DIOS). In 1986, the PTO will continue progress in implementing and evaluating the APS test bed operations, capturing the patent data base in electronic form and maintaining the T-SEARCH and the TRAM 2 system. The 1987 increases will provide for the completion of the testbed evaluation and the initiation of the expansion of the APS and DIOS and the integration of trademark systems.

4. Financing From Prior Year Funds.

Reflected as an offset to the 1987 requirement for new spending authority is the carry-forward of $1,985,000 from 1986 into 1987. These funds were saved in the Patent Examination-Professional and Automation line items by the following events that were unanticipated at the time of the 1986 Request to Congress:

- Due to increased patent examiner productivity and changing patterns of attritions it proved unnecessary to fill 25 of the anticipated 150 new examiner positions in 1985. The full year savings in 1986 are $1,191,000.

- New computer space needed for the Automated Patent System (APS) was previously scheduled for acquisition on October 1, 1985. The current schedule is for acquisition on July 1, 1986. The resultant savings are $786,000.

- Consulting services were reduced by $8,000 under Public-Law 99-190 in 1986. The savings were from consulting services support in implementation of the Automation Master Plan.

These funds will be used in 1987 to augment the current 18/87 patent pendency reduction effort and Automation.

5. Increased user fee collections in 1987.

The PTO has revised its current fee schedule as directed by P.L. 97-247 for the 1986-1988 fee cycle. Patent fees have increased by the change in the Consumer Price Index for the prior three year period. Service fees have been adjusted to recover appropriate program costs for the 1986-1988 fee cycle period. Trademark fees have not been revised but will be adjusted by the beginning of FY 1987. The amounts reflected for trademark fees in this budget reflect full recovery of the cost of the trademark process.

Following is a comparison of the 1986 appropriation and the 1987 budget estimate and related data on current employment for the programs of the Patent and Trademark Office:

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc. (+) or Dec. (-)		
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Emp. 12/31
Salaries and expenses..............	3,408	$220,179	3,401	$243,444	-7	+$23,265	3,064
Less reimbursements................	...	(200)	...	(200)	...	...	
Less offsetting fee collections....	...	-119,486	...	-131,827	...	-12,341	
Less financing from deferral of prior year fee collections into FY 1986..........................	...	-15,993	...	...	...	+15,993	
Less financing from deferral of FY 1986 funds into FY 1987..........	...	...	...	-1,977	...	-1,977	
Less financing from unobligated balance of FY 1986 funds into FY 1987.............................	...	...	...	-8	...	-8	
Appropriation requested............	3,408	84,700	3,401	109,632	-7	+24,932	

Note: Dollar amounts in parentheses represent fees for miscellaneous Federal reimbursements.

The 1987 program budget request of $243,444,000 is a net increase of $23,265,000 over the program budget level of $220,179,000 for 1986. Applying 1987 fee collections of $131,827,000 and prior year unobligated balances available of $1,985,000, the 1987 appropriation requested is $109,632,000. This is a net increase of $24,932,000 above the $84,700,000 currently available. Of the net increase of $24,932,000, $15,993,000 is specifically needed to offset the nonrecurring application in 1986 of "excess" fees accumulated during the first fee cycle.

The proposed 1987 changes to the 1986 revised appropriation by budget activity are:

Activity	Description	Permanent Positions	Amount
Adjustments to Base	Restoration of the proposed 1986 five percent pay cut costs; inflationary adjustments; other decreases	...	+$6,968
Patent Process	Augment Patent Board of Appeals and Interferences	+3	+67
	Reducing patent pendency	-60	-796
	Automation initiatives	...	+9,647
	Prepare examiner workstation area		+891
	Increase Patent Printing	...	+351
	Subtotal	-57	+10,160
Trademark Process	Maintain data base with enhanced text editing and proofreading	...	+296
	Augment Trademark Trial and Appeal Board	+4	+120
	Automation initiatives	...	+901
	Subtotal	+4	+1,317
Information Dissemination	Paper Trademark Public Search Room	+5	+322
	Expand microfilming of patent applications	...	+ 42
	Copy fulfillment system overhaul	...	+167
	Automation initiatives	...	-1,405
	Subtotal	+5	-874
Executive Direction and Administration	Automation initiatives	+32	+5,484
	Enhance Pre-Examination mail processing	+9	+ 210
	Subtotal	+41	+5,694
	Total Changes	-7	+23,265
Offsetting Fee Collections	1987 receipts	...	-12,341
Unobligated Balances	Financing From 1986 unobligated balances	...	-8
	Financing From 1986 Deferral	...	-1,977
	1986 Budget Authority Requirement Offset by Prior Year Receipts	...	+15,993
	Total Financing Changes	...	+1,667
	Net Changes	-7	+$24,932

Actual and projected key workload indicators are as follows:

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
1. Patent Process:				
Regular patent applications (excluding designs):				
Applications received..............	109,539	116,427	116,000	116,000
Application disposals...............	113,300	120,488	128,000	130,000
Total applications in Office (end of year)......................	240,304	237,197	227,187	212,757
Patent grants printed..............	67,214	70,244	74,640	79,000
Total pendency in Office (in months)........................	25.0	23.2	21.1	18.9
2. Trademark Process:				
Trademark applications:				
Applications received (including extra classes)......	61,480	64,677	66,800	68,800
Application disposals by Examiners......................	82,130	86,318	66,800	68,800
Total applications in Office (end of year)..................	106,585	76,362	76,362	76,362
Trademark registrations printed..	45,475	63,122	44,200	45,600
Pendency to first action (in months)....................	5.3	2.6	3.0	3.0
Pendency to Disposal (in months)....	19.1	13.8	13.0	13.0

Activity/Subactivity Change Crosswalk
(Dollar amounts in thousands)

Format of Fiscal 1986 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Salaries and expenses:	
Patent Process:	$152,290
Examination-professional..................	113,821
Examination-clerical.....................	15,922
Appeals [1].............................	3,454
Interferences [1]........................	1,161
Patent printing..........................	17,932
Trademark Process:	14,607
Examination of trademarks................	12,459
Trial and Appeal Board...................	1,458
Trademark printing.......................	690
Information Dissemination:	42,169
Customer services........................	12,384
Publication services.....................	3,983
Data & document retrieval systems........	25,802
Executive Direction and Administration:	34,378
Commissioner.............................	549
Solicitor................................	1,649
Legislation & international affairs.......	1,173
Management planning......................	2,404
Administrative services..................	6,742
Automation...............................	20,757
Quality review...........................	1,104
Total....................................	243,444

Format of Fiscal 1987 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Salaries and expenses:	
Patent Process:	$152,290
Examination-professional..................	113,821
Examination-clerical.....................	15,922
Appeals and Interferences.................	4,615
Patent printing..........................	17,932
Trademark Process:	14,607
Examination of trademarks................	12,459
Trial and Appeal Board...................	1,458
Trademark printing.......................	690
Information Dissemination:	42,169
Customer services........................	12,384
Publication services.....................	3,983
Data & document retrieval systems........	25,802
Executive Direction and Administration	34,378
Commissioner.............................	549
Solicitor................................	1,649
Legislation & international affairs.......	1,173
Management planning......................	2,404
Administrative services..................	6,742
Automation...............................	20,757
Quality review...........................	1,104
Total....................................	243,444

[1] A reorganization combined these two offices into the Board of Patent Appeals and Interferences.

GOAL AND QUOTAS

Mr. **Smith**. In what way are you involved with this lack of agreement within the administration about goals and quotas?

Mr. **Gonzales**. We have no problem, Mr. Chairman, with that situation. We have a pretty well-defined scope of work for minority business in the original executive order in 1969. It defines specifically who minorities are. It defines specifically what the role of the agency is.

We don't have any standards to contend with as other agencies, so, therefore, any minority who meets that criteria is available to us and we work with them. We don't have a problem with that situation.

Mr. **Smith**. So how this is finally resolved on quotas and goals has no effect on you, are you saying?

Mr. **Gonzales**. We have been fortunate in that our programs have been very well-defined in that respect. We have never had any problems—for example, in recovering information, gathering information on minority businesses as Executive Order 12432 has proved. We don't have any concern in that area. I don't think we would be affected dramatically.

GSA RENT

Mr. **Smith**. You have a very substantial increase for GSA space requirements. What is the nature of that? Is this to increase the number of square feet or are they just charging you more money?

Mr. **Gonzales**. They are charging us more.

Mr. **Smith**. For the same amount of space?

Mr. **Gonzales**. Yes, sir.

SEQUESTRATION

Mr. **Smith**. Are you able to take care of the sequestration without any RIFs or furloughs?

Mr. **Gonzales**. Yes, sir. We will assume the cuts, across-the-board without any RIFs, any furloughs or any closing of field offices.

Mr. **Smith**. Are you expecting, though, to restore those reductions in 1987?

Mr. **Gonzales**. Yes, sir.

Mr. **Smith**. To what extent are you just postponing something rather than saving money?

Mr. **Gonzales**. We are not filling critical vacancies that exist at the present time, and we will take care of the rest through administrative cost reductions in our agency.

Mr. **Smith**. So part of it is permanent savings and part of it is delaying an expenditure?

Mr. **Gonzales**. Yes, sir, I believe so but I will check.

Mr. **Smith**. Do you have a breakdown of what percent?

Mr. **Gonzales**. No, sir, we don't.

Mr. **Smith**. For the record, let's get some kind of a breakdown.

[The information follows:]

Our 1986 Gramm-Rudman-Hollings sequestration represents one-time savings only. Thirty percent (30%) of the reduction comes from program management activities and includes not filling vacancies for part of the year. The remaining 70% of the reduction will come from program funds. All program areas will be reduced equally. The program reductions will be realized by reducing the specialized consulting services component of the MBDC program and the number of public and private sector grants during 1986. In the Advocacy, Research and Information program activity, we will limit the scope of this year's sponsored research.

1987 SERVICES

Mr. SMITH. Under your proposed budget, what level of service would you have in 1987 compared to 1986 after sequestration?

Mr. GONZALES. We will have the same amount of services delivered. We are maintaining the same number of business development centers, which is our main delivery system.

We are not proposing to cut back any type of service activity to the minority business community.

Mr. SMITH. Did we give you too much money in 1986?

Mr. GONZALES. No, sir.

Mr. SMITH. Can you do this in 1987 with less money?

Mr. GONZALES. No, sir, we are being very careful to look at our money. For example, if necessary, we have a specialized consulting service feature which is part of every minority business development center. We are prepared to recoup this back into the fold if there arises a need to do so. That specialized consulting service, is 10 percent of every grant that we execute throughout the country.

Mr. SMITH. Why weren't you doing that in 1985?

Mr. GONZALES. We did not anticipate that we would need to do so. We were hoping that our business development centers would be utilizing those funds to provide that assistance, which was not available at the minority business development center level.

Mr. SMITH. So as long as you had plenty of money, you weren't as efficient as you could have been?

Mr. GONZALES. We found that business development centers were not utilizing all the specialized consulting services. That does not mean to say we have not utilized these funds.

We have, by funding additional projects which we had no appropriations for, specialized projects, pilot demonstration projects throughout the country that benefit the minority business communities.

Mr. SMITH. If we cut you some additional comparable to the sequestration, will you find some other place you can be more efficient?

Mr. GONZALES. We are pretty well down to the wire at this stage.

Mr. SMITH. What if you do get another sequestration in 1987? How will you handle that?

Mr. GONZALES. I think we will have to look at our budget again without sacrificing the service delivery to the minority business community.

Mr. SMITH. You will be able to do it without sacrificing service?

Mr. GONZALES. I would not be able to tell you at this time, sir.

Mr. SMITH. If you do have to reduce your services, what services would you reduce first?

Mr. GONZALES. I am not in a position to provide that information, sir, at this time.

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount
Privately-owned automobiles			15			15			...
GSA vehicles................			8			8			...
Total, travel & transportation of persons..			337			337			...
22.0 Transportation of things									
Freight.....................			55			55			...
Express.....................			20			20			...
Total, transportation of things.................			75			75			...
23.1 Standard level user charges			1,078			1,078			...
23.2 Other rent, communications & utilities									
Federal Telecommunications Systems..................			200			200			...
Other telephone, telegraph & teletype services......			60			60			...
Postal services by USPS....			87			87			...
Rental of office copying equipment................			10			10			...
Other equipment rental.....			70			70			...
Total, other rent, communications & utilities			427			427			...
24.0 Printing & reproduction									
Publications.....			169			169			...
Other printing & reproduction..................			20			20			...
Total, printing & reproduction................			189			189			...

Object Class	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)		
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
25.0 Other services									
Training:									
University................			31			31			...
Office of Personnel Mgt...			34			34			...
Other.....................			3			3			...
Maintenance of equipment....			30			30			...
GSA alterations & repairs...			5			5			...
Centralized Departmental Services..................			2,016			2,016			...
Other services..............			121			121			...
Program contracts...........			3,495			3,495			...
Total, other services.....			5,735			5,735			...
26.0 Supplies & materials									
Office supplies & material..			33			33			...
Books & periodicals.........			10			10			...
Other.......................			2			2			...
Total, supplies & material			45			45			...
31.0 Equipment									
Office furniture & fixtures.			22			22			...
Office machine & equipment..			19			19			...
Total, equipment..........			41			41			...
41.0 Grants, subsidies & contributions									
Grants.....................			28,000			28,000			...

Minority Business Development Agency
Minority Business Development

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thouands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	$ 41	$ 12	$ 12	$ 12
Pamphlets	42	20	20	20
Audiovisuals	...	22	15	15
Total	$ 83	$ 54	$ 47	$ 47

Executive Order 11625 authorizes the Minority Business Development Agency (MBDA) to provide "for the development, collection, summarization, and dissemination of information that will be helpful to persons and organizations throughout the nation in undertaking or promoting the establishment and successful operation of minority business enterprise." MBDA's Office of Public Affairs is responsible for the creation of periodicals, publications, and audiovisuals to carry out the mandate set forth in Executive Order 11625.

Minority Business Development Agency
Minority Business Development

Average Grades and Salaries

	1985 Actual	1986 Estimate	1987 Estimate
Average ES Salary	$59,359	$58,490	$58,490
Average GS Grade	10.75	10.95	10.95
Average GS Salary	$28,919	$30,684	$30,684

Minority Business Development Agency
Minority Business Development
Consulting and Related Services
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$...	$...	$...
Management and professional services	73	50	50
Special studies and analyses	...	...	...
Management and support services for research and development	...	...	...
Total	$ 73	$ 50	$ 50
Amount withheld from obligation pursuant to P.L. 99-190		-5	

PROGRAM DELIVERY SYSTEMS

We consider our three basic program delivery systems to be very essential. We are the only minority business agency at this time, in addition to the 8-A program.

Mr. **Smith**. Are you saying you think that they are all three of equal priority?

Mr. **Gonzales**. Well, our minority business development center network is our primary contact with the minority business community and the private sector out there. We are located in approximately 39 states. Those centers are selected on the basis of minority business formations, minority populations, so we try and serve the areas that have the greatest need for that service.

Our advocacy research and information program is considered dramatically important because we are in an information era. We no longer have to answer questions about the largest minority problem being a lack of capital resources or a lack of technical assistance. We are providing that.

But our primary problem today is the information that the minority business community doesn't have. We are finding they don't know where to go for assistance, for example, in dealing with government and we can play an important part in assisting them in that respect.

The program of Resource Development brings us together with the public and the private sector. We are finding out that, as more and more minority businesses are identified capable of doing business with government, as 8-A contractors have done in the past, that we are graduating or branching out in the private sector. And again, this program that we fund can also help us look at the state and local governments, for example, for additional procurement opportunities for those corporate minority entities.

So all three programs would be very, very effective, and I would not see a way that we could cut any one of them.

Mr. **Smith**. If you had to make a reduction, how do you reduce one of those programs?

Mr. **Gonzales**. If I had to make a choice, and I would not be in favor of it, but if I had to, then I would shift the responsibility back on state and local governments. That would be the only response or the most immediate response that I would make at this time.

Mr. **Smith**. Could you reduce the number of these centers or would you leave an area uncovered if you did?

Mr. **Gonzales**. We have done so only in those areas where we find that a savings can be realized without sacrificing delivery of services to any specific area. We did that last year on a couple of occasions where we found that our money could be better utilized by centralizing operations in a large business development center and providing a circuit rider type of activity to outlying areas.

Mr. **Smith**. Do you think you ended up with a superior service, then, or not?

Mr. **Gonzales**. I believe so. I think we did, sir.

Mr. **Smith**. Metropolitan areas you are talking about?

Mr. **Gonzales**. Yes, sir. Since we have more resources to bring—since we have resources either from a financial viewpoint, government agencies, localized government efforts, we find that we are better off by centralizing centers. We have 97 as of last count.

Mr. SMITH. Largely metropolitan area centers?

Mr. GONZALES. Not necessarily. We try to locate those where there is a major concentration of minority population, and lately, we have added even minority business formations to that criteria. That is included in the way that we select the centers.

Mr. SMITH. If we have any other questions, we will submit them for the record.

Mr. GONZALES. Thank you, sir.

Mr. SMITH. Thank you.

[Questions for the record follow:]

"Questions for the Record by Congressman Neal Smith"

Fiscal Year 1986 Activities

QUESTION:

In our 1986 Committee report, we directed MBDA not to close any offices and to carryout activities at all locations in 1986 that were conducted in 1985, yet we have learned that some offices have been closed and contracts not renewed, such as in Flint, Michigan. Although we were told by the Department until six weeks ago these offices were continued to be funded. Can you please explain what the discrepancy is here?

ANSWER:

The Flint MBDC was closed as of March 31, 1985, before the subject House report was issued. The Department closed the Flint, Michigan MBDC due to internal management problems and program deficiencies of the grantee recognized by MBDA and the Office of the Inspector General (IG). The Department's IG recommended not to renew the Flint MBDC award to the Flint Community Development Corporation in their September 1984 audit because of these deficiencies. Also, the Department was able to realize cost savings through consolidation during a time of budget constraints. Services are being provided to the Flint, Michigan minority business community through the Detroit MBDC. During the nine (9) month period, October 1, 1982 through June 30, 1983, the Flint BDC provided substantial assistance to only 14 clients. Based on this experience, MBDA has arranged for a circuit rider to assist Flint's minority business clients based on requests.

QUESTION:

We also provided language that instructed you within existing resources to open an office in Northern Ohio. What is the status of that office?

ANSWER:

MBDA will establish a Canton satellite office with approximately 2 full-time positions through an amendment to the Cleveland, Ohio MBDC grant. This amendment will be implemented by July. Because of Gramm-Rudman-Hollings reductions, the Canton office will be funded at $67,000.

Fiscal Year 1987 Budget Request

QUESTION:

You are requesting resources to carryout the same level of programs in 1987 that you carried out in 1986. Do you plan to change your program delivery mechanism or the way in which you operate or your cost-sharing activities in 1987?

ANSWER:

No, MBDA does not plan to change the program delivery mechanism, the way in which we operate or our cost-sharing activities in 1987.

QUESTION:

Please discuss your rental increases of $218,000 to GSA. Is this for your space in the Hoover building or space outside? What is the level of total investment you have been able to secure through MBDA assistance in 1986? What is the projected level for 1987 for total investment? What is the average level of assistance that an MBDA client has been able to secure?

ANSWER:

The rental increase is due to GSA's rate increase for the Hoover building and Field Offices. For Fiscal Years 1986 and 1987, MBDA anticipates securing approximately $350 million in loans and $800 million in contracts for clients assisted with management and technical assistance. The average amount of credit assistance per client assisted is approximately $175,000 each and for procurements over $130,000 each.

QUESTION:

How has this been combined between private and public financing mechanisms? Do you ever work in conjunction with small business development loans or EDA assistance in assisting your client?

ANSWER:

For 1985, nationwide financing assistance to clients is as follows:

Private Financings..	83.95%
Public Financings...	15.30%
Combination Financings (Minority Enterprise Small Business Investment Company's)..	.75%
	100.00%

MBDA clients have received small business development loans and the Agency has worked with EDA in developing minority businesses in economically distressed areas.

Questions for the Record by Congressman Bob Carr

Use of Community Based Organizations Versus Big 8 Accounting Firms

QUESTION:

Is there an effort on the part of MBDA to replace minority community based business development organizations with big 8 accounting firms? How many big 8 firms have been contracted out by MBDA?

ANSWER:

No, there is no planned effort on the part of the Minority Business Development Agency (MBDA) to replace minority community based business development organizations with big 8 accounting firms.

MBDA competitively selects and funds approximately 100 organizations to provide management and technical assistance to minority clients located throughout the country. The competitive solicitation is sought through requests published in the Federal Register and/or the Commerce Business Daily. MBDA funds its Minority Business Development Centers (MBDCs) through the cooperative agreement funding mechanism.

Those eligible to receive a MBDC award include individuals, non-profit organizations, for profit firms, local and state governments, American Indian Tribes, and educational institutions. This process is open to both minority and non-minority firms. In order to fund organizations that would provide the highest level of quality assistance to minority clients, those firms/individuals were chosen which had the greatest strength in the following areas:

1. Capability and experience of firm/staff
2. Techniques and methodology to accomplish program goals
3. Resources available (technical and administrative)
4. Costs

Only one (1) Big 8 firm has been funded by MBDA. Price Waterhouse won nine (9) awards in nine (9) cities in FY 1984. None have been awarded since then.

Those locations receiving Price Waterhouse awards in FY 1984 were Salt Lake City; Cincinnati; Columbus, Ohio; Dayton; St. Louis; Bakersfield; Stockton; Tucson; and Sacramento.

QUESTION:

Since 1984, within the Chicago Region, how many minority community based organizations have lost their contracts/awards and who were they replaced by?

ANSWER:

Between 1984 and the present, only three (3) minority or community based organizations within the Chicago Region have not had their MBDA contracts renewed. The Chicago Economic Development Corporation was replaced by David J. Burgos and Associates, a minority firm for one of the two Chicago BDCs. The Detroit MBDC award operated by Southeastern Michigan expired on March 31, 1986. The recommended replacement is pending. The Flint BDC, formerly operated by Flint Community Development Corporation, was consolidated with the Detroit BDC.

QUESTION:

Since you have been the Director of MBDA, how many minority community based organizations have lost their contracts and how many were replaced by other minority community based organizations and Big 8 accounting firms — nationwide?

ANSWER:

As of March 1986, 22 minority community based organizations lost their awards; 11 minority community based organizations were replaced by other minority community based organizations; no minority community based organizations were replaced by a Big 8 accounting firm.

QUESTION:

Why was it that last year, due to late funding and carryover of awards, that certain minority community based organizations had to layoff staff and close their doors and some go out of business when, at the same time, the Agency carried over to this fiscal year about $11 million in program funds? How many of those minority community based organizations that had to cease operations have been replaced by accounting firms?

ANSWER:

MBDA's awards are made for periods of one (1) year, except when an organization is closed down for poor performance or non-performance or when no qualified organization can be found to service an area. Last year, only $2.7 million of the carryover was attributed to Business Development Centers. A total of $6.3 million represented funds for trade associations, chambers of commerce, and special projects; and $2 million was from prior year funds recovered in the last two (2) months of the fiscal year.

As of March 1986, five (5) accounting firms, other than Big 8 accounting firms, have replaced minority community based organizations which had to cease their operations.

TUESDAY, MARCH 18, 1986.

UNITED STATES TRAVEL AND TOURISM

WITNESSES

DONNA F. TUTTLE, UNDER SECRETARY FOR TRAVEL AND TOURISM

DAVID L. EDGELL, DIRECTOR, OFFICE OF POLICY AND PLANNING

JERRY MANOLATOS, DIRECTOR, OFFICE OF MANAGEMENT AND ADMINISTRATION

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER. The next agency whose budget we will review is that of the United States Travel and Tourism Administration. Here to testify is the Honorable Donna Tuttle, the Under Secretary for Travel and Tourism.

The 1987 budget request is for $4,023,000, which represents a decrease of $7,461,000 below the 1986 adjusted appropriation level of $11,484,000. The 1986 Gramm-Rudman sequestration totalled $516,000.

At this point we will insert the justifications in the record.

[The justifications follow:]

DEPARTMENT OF COMMERCE
UNITED STATES TRAVEL AND TOURISM ADMINISTRATION

Budget Estimates, Fiscal Year 1987
Congressional Submission

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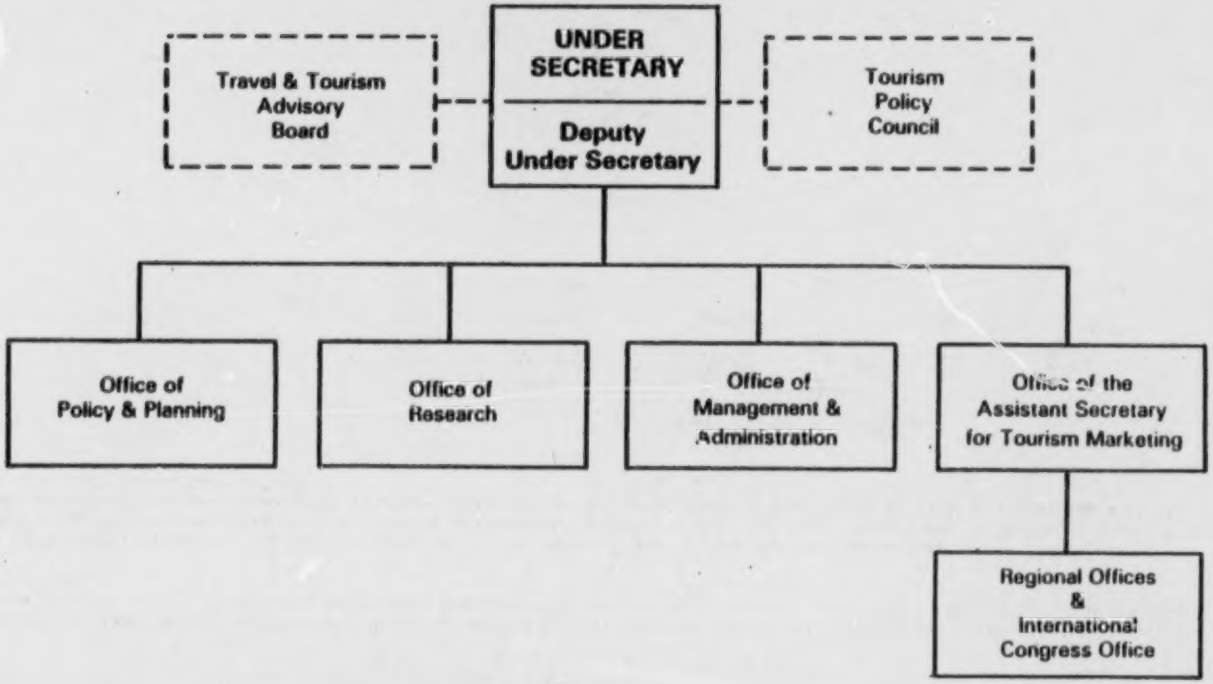
Congressional Submission

February, 1986

U.S. Department of Commerce

UNITED STATES TRAVEL AND TOURISM ADMINISTRATION


UNDER SECRETARY
Deputy Under Secretary
Travel & Tourism Advisory Board
Tourism Policy Council
Office of Policy & Planning
Office of Research
Office of Management & Administration
Office of the Assistant Secretary for Tourism Marketing
Regional Offices & International Congress Office

USTTA-1

General Statement

The overall goal of the United States Travel and Tourism Administration (USTTA), as outlined in the National Tourism Policy Act, is to plan, develop, and carry out an international tourism marketing program designed to stimulate and encourage travel to the United States by residents of foreign countries.

The FY 1987 request of $4,023,000 provides funding for the phase out of the United States Travel and Tourism Administration (USTTA) by September 30, 1987. Some tourism promotion activities are already performed by private, State, and local tourism organizations. These organizations can assume additional functions when USTTA is phased out. The following is a comparison of the FY 1986 appropriation with the FY 1987 estimate and related data on current employment.

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc. (+) or Dec.(-)		Perm. Emp. 12/31/85
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Salaries and expenses....................................	80	$12,000	29	$4,023	-51	-$7,977	74

Justification of Proposed Language Changes

1. After the word "expenses" insert "to close out" and delete the word "of".

2. Delete the balance of text after the word "Administration...$12,000,000" insert "$4,023,000".

The deletion of this language reflects the termination of the USTTA program in FY 1987.

Appropriation Language and Code Citations

1. "For necessary expenses to close out the United States Travel and Tourism Administration."

22 U.S.C 2121-2127

22 U.S.C. 2121-2127 provides that "...the Secretary of Commerce shall...develop, plan and carry out a comprehensive program designed to stimulate and encourage travel to the United States by residents of foreign countries..."

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Page No.	Summary of Adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			80	$12,000
	1987 base			80	12,000

Comparison by activity:	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
USTTA-6 International tourism development	66	$10,363	68	$10,741	68	$10,741	22	$3,600	-46	-$7,141
USTTA-15 Executive direction	12	1,169	12	1,259	12	1,259	7	423	-5	-836
Change									-51 (-51)	-7,977
Total requirements	78 (73)	11,532 (11,522)	80 (80)	12,000	80 (80)	12,000	29 (29)	4,023		

Note: Permanent position amounts in parentheses represent workyears. Dollar amounts in parentheses represent obligations.

Justification of Program and Performance
(Dollar amounts in thousands)

Activity: Tourism
Subactivity: International tourism development

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
International tourism development........	66	$10,355	68	$10,741	68	$10,741	22	$3,600	-46	-$7,141

Goals and Objectives

The mission of the United States Travel and Tourism Administration (USTTA) as outlined in the National Tourism Policy Act is to carry out an international tourism marketing program designed to stimulate and encourage travel to the United States by residents of foreign countries.

The agency's goals are: (1) Expand U.S. public and private sector tourism organizations' marketing efforts abroad; (2) increase U.S. tourism exports and the U.S. share of the international travel market; (3) reduce the nation's travel deficit; (4) provide accurate and timely information and services to U.S. travel trade exporters; and (5) reduce barriers to travel.

The program objectives of USTTA in FY 1986 are to: (1) Develop and implement integrated marketing campaigns abroad and seek outside cooperative advertising contributions from public and private sector organizations; (2) initiate long-term cooperative marketing programs to be funded at 80 percent by 420 outside organizations; (3) conduct support programs in nine USTTA major market countries by responding to 410,000 consumer inquiries and 145,000 trade inquiries; provide 35,000 shipments of information materials to travel outlets; assist 60 travel missions; and make 30,000 trade contacts; (4) develop international marketing plans for two U.S. regions; (5) motivate 20 U.S. Convention and Visitors Bureaus to initiate or expand their marketing efforts to attract 40 new international congresses to be held in their venues; (6) develop and provide accurate, timely data on travel necessary to guide planning in the public and private sectors; (7) evaluate the impact and relative effectiveness of USTTA promotional programs; (8) reduce foreign and domestic impediments to inbound and outbound tourism through legislation, bilateral and multilateral negotiations, and airport facilitative programs; and (9) provide tourism policy coordination through the Tourism Policy Council and legislated State tourism policies.

USTTA will employ three core strategies as a means of developing its major marketing programs and campaigns. A major campaign is defined as a fully integrated promotional effort aimed at a major consumer target group, a major product area or region, or a major seasonal activity. The marketing mix for a campaign includes sharply focused efforts in cooperative advertising, journalist familiarization tours, travel missions, road shows, media events, and travel trade training workshops and seminars.

The three strategies are:

(1) Initiate cooperative promotional campaigns in key foreign tourism markets to cause states, cities, and the tourism industry to market their products abroad, and to motivate prospective foreign tourists to travel to the United States.

(2) Initiate long-term tourism development programs in key foreign tourism markets to educate and inform the travel trade and prospective visitors about possibilities for travel to the United States.

(3) Conduct support programs for conveying public and private materials to the trade and consumers in key foreign markets.

In developing its marketing programs and campaigns, USTTA follows well-established principles and procedures for marketing planning. The first step in this process is a situation analysis -- an assessment of factors influencing the effectiveness of promotional efforts abroad. This assessment involves study of past, present, and expected market performance and tourist travel patterns; the competitive environment in the target country; the changing economic conditions affecting market demand; and the characteristics and travel patterns of consumer segments.

Specific goals and objectives are then set in the planning process for the USTTA marketing effort. Methods for achieving these goals and objectives are identified and evaluated. The most appropriate methods are selected, and individual marketing tactics are formulated for reaching target markets. Priority is given to markets which have the greatest potential for incremental market penetration through the promotional activities of the U.S. travel industry.

The marketing tactics employed in foreign markets are based on decisions concerning several interdependent marketing plan components: (1) Developing a definition of the U.S. tourism "product" to be promoted, including message and image; (2) selecting the tools for presenting the product -- the sales force, distribution channels, cooperative advertising media, sales promotion techniques, and media relations; and (3) establishing support services, including marketing research, developing cooperative advertising relationships, personnel development, and collateral promotional materials.

1986 Program

In FY 1986, USTTA will maintain: Regional Offices, staff, and marketing programs in the nine countries that produce 82 percent of the international visitors to the U.S. and 72 percent of foreign tourism earnings; special market programs conducted in 14 other countries in cooperation with the Foreign Commercial Service of the International Trade Administration; and an International Congress Office in Paris to attract international conventions to the United States. Agency direction and management, including policy and planning, research, marketing support, executive direction and administration will be provided from Washington, D.C. Marketing activities will consist of major promotional campaigns specific to each market involving partnerships with U.S. and foreign private sector organizations. The program will include cooperative advertising, consumer and trade information, product information, familiarization tours, seminars, trade shows and travel missions, multilingual receptionist programs, and the production, storage, and distribution of limited locally-produced informational materials. The USTTA research program will continue to collect and provide marketing intelligence and consumer research information for marketing planning purposes, as well as develop expanded evaluation data measuring the effectiveness of USTTA's marketing programs.

Policy activities will include providing forums for interagency cooperation in tourism and participating in international tourism policy meetings. Policy documents outlining and responding to tourism initiatives will be prepared together with a model for legislated State tourism policies.

REGIONAL OFFICE OPERATIONS (FTE 51; $3,843,000)

USTTA maintains nine Regional Offices abroad, located in central metropolitan locations for each market. The offices implement the strategies to conduct USTTA campaigns and other marketing programs. Each Regional Office has a VISIT USA Committee, consisting of U.S. and/or foreign tourism organizations represented in the country. The committee meets on a regular basis to offer counsel, advice and assistance in planning U.S. travel promotions and to participate in cooperative promotional campaigns.

Regional Offices also operate special market programs in 14 other countries in cooperation with the U.S. and Foreign Commercial Service and local travel trade or VISIT USA Committees. These programs involve technical assistance and training for the travel trade to increase effectiveness in selling the U.S. travel product. The 14 special market countries are Venezuela, Switzerland, Spain, Belgium, Denmark, Norway, Sweden, Finland, Austria, Taiwan, Hong Kong, South Korea, Singapore, and New Zealand.

In addition to the Regional Offices, USTTA maintains an International Congress Office in Paris. The primary function of this office is to solicit the international congress business of international associations, a majority of which are headquartered in four European cities: Brussels, London, Geneva, and Paris. By maintaining a physical presence in the American Embassy in Paris, USTTA is able to provide liaison between these organizations and the U.S. communities and their business and convention bureaus.

COOPERATIVE PROMOTIONAL CAMPAIGNS ($2,458,000)

USTTA will concentrate efforts to develop and conduct one or more major cooperative promotional campaigns. These campaigns provide a vehicle for private, State and local organizations to get increasingly involved in the market. Integrated marketing campaigns are aimed at a major strategic target, a major product area or region, and/or a major seasonal activity. The marketing mixes for campaigns include focused efforts on cooperative advertising, journalist familiarization tours, travel missions, road shows, media events, and travel trade workshops and seminars. Campaigns also involve services and organizations such as car rental services, States, cities, attractions, regional tourism groups, accommodation services, air and ground carriers, food services, and chambers of commerce. Focused campaigns provide measurement opportunities such as actual bookings and advertising coupon conversions.

LONG-TERM COOPERATIVE MARKETING PROGRAMS ($594,000)

USTTA initiates programs with private, State and local tourism organizations in key foreign markets to build long-term interest and capability in promoting travel to the United States. Activities include educational/training seminars and workshops in the marketplace and travel missions by groups representing specific U.S. destination areas. These activities are funded at least 80 percent by tourism organizations. These programs increase consumer interest in travel to the U.S. and lead to the development of new travel products.

SUPPORT PROGRAMS ($1,604,000)

Regional Offices are staffed by trained tourism marketing specialists and information counselors. These individuals provide support services for the implementation of programs to educate and motivate the foreign-based wholesale and retail industry to sell the United States as a destination. They provide informational materials and services to individual consumer prospects, and stimulate demand for the U.S. tourism product by means of selective media information programs.

RESEARCH ($1,000,000)

USTTA gathers, analyzes, and provides comprehensive data on international travel to be used by public and private sector tourism marketing and policy planners. The USTTA research program is designed to address existing data needs and to assess marketing program impact and effectiveness. Major components of the research program include:

In-Flight Survey of International Air Travelers - $410,000
Initiated in FY 1982, the In-Flight Survey gathers marketing information from foreign travelers departing the United States. This system entails cooperative, in-kind support by 37 major international air carriers and is financed in part through user fees, subscriptions, and interagency funding. In FY 1986, approximately $85,000 is projected in financial support for this program from outside sources. Besides providing comprehensive analyses of visitor spending, the system will also be used to upgrade the Department's data on the U.S. international travel dollar accounts. Four quarterly national reports are issued to subscribers. Special data analyses and user tapes will be provided to major sponsors and individual purchasers as required.

Marketing Program Evaluation Studies - $150,000
Marketing Program Evaluation Studies will track and assess the effectiveness and impact of USTTA marketing programs, using analytical studies and detailed reporting procedures. This effort will include pre- and post-campaign consumer surveys, coupon conversion studies, tracking of changes in visitation patterns of specific target market groups, and follow-up surveys of trade show and seminar attendees.

Mexican Border-Crossing Survey - $150,000
With the Mexican government, USTTA will jointly sponsor an ongoing Mexican Border-Crossing Survey, which gathers basic statistical data on Mexican land border-crossers. Existing INS statistical reporting systems are incapable of providing periodic tabulations on the volume, characteristics, or economic impact of Mexican tourists visiting the U.S. by land transportation in the border area. Consequently, several million visitors are omitted annually from U.S. foreign visitor counts. The USTTA-Mexican government monthly surveys at selected border-crossing points will correct this deficiency in the Federal data base.

Foreign Visitor Arrival Statistics - $65,000
Monthly reports of reprogrammed INS data on non-immigrant arrivals will be prepared and issued to paying subscribers quarterly. Using monthly data provided by the INS, non-immigrant arrivals to the United States will be analyzed in terms of the volume of visitors by country of residence, port of entry, mode of transport, and type of visa. These data provide base-line measurement on the inflow of foreign tourism to the United States. USTTA reports will be issued on a subscription basis through the NTIS.

Consumer Surveys - $200,000
In-Country Consumer Surveys will be conducted in Japan, United Kingdom, Germany, France and the Nordic countries. The studies will establish U.S. competitive positioning, potential travelers' characteristics, prime target market segments, and their images, attitudes, and international travel preferences. Data from these surveys will guide development of private, State and local cooperative promotional programs in these countries.

Econometric Forecasting Model - $10,000
An econometric model to forecast inbound travel will be updated and operated. This model will quantitatively link changes in international tourism flows to changes in independent economic variables -- those which influence tourism consumption -- enabling USTTA to objectively project foreign tourism demand from major market countries, based on available economic forecasts.

Economic Impact Study - $15,000
A study to assess the distribution and impact of foreign visitor expenditures on U.S. national, regional, and State economies will be updated for CY 1985/1986. Information provided by this study will assist in convincing potential cooperative partners in the U.S. tourism industry to become increasingly involved in promoting inbound tourism.

POLICY

USTTA tourism policy initiatives involve efforts to increase tourism to the United States through removal of government-imposed impediments to international travel flows and coordination and establishment of government policy relating to travel and tourism development and facilitation. In this capacity, USTTA interacts with the travel trade, other governmental policy offices, intergovernmental bodies, and international organizations. USTTA represents the Department as an official participant in bilateral and multilateral negotiations to reduce or eliminate impediments to tourism. Such obstacles act as non-tariff trade barriers, hamper U.S. travel industry access to foreign travel markets, and interfere with freedom of movement. Major impediments to tourism currently imposed by foreign governments include exchange controls which limit the amount of currency a national may purchase for travel abroad; departure taxes; excessive passport fees; non-interest-bearing bank deposit requirements for nationals seeking to travel abroad; and exit visas.

USTTA will seek to reduce foreign and domestic impediments to U.S. international tourism through legislation, bilateral and multilateral negotiations, and airport facilitation programs. The agency will provide policy coordination through the Tourism Policy Council to: (1) coordinate the policies and programs of Federal agencies that have a significant effect on tourism, recreation, and national heritage preservation; (2) develop areas of cooperative program activity; (3) assist in resolving interagency policy and program conflicts; and (4) seek and review concerns of the U.S. private travel industry and State and local governments relative to Federal policies and programs deemed to conflict with the orderly growth and development of tourism. USTTA will also encourage States to adopt tourism policies to attract foreign visitors to the United States.

MULTILINGUAL RECEPTIONIST ($255,000)

USTTA operates a multilingual receptionist program at 12 major U.S. airports to provide welcome and interpreting service to non-English speaking international arrivals. The receptionists are stationed in Federal inspection areas and work closely with the Immigration and Naturalization Service, the Customs Service and the Department of Agriculture to expedite the entry of foreign visitors.

HEADQUARTER'S STAFF SUPPORT (FTE 17; $987,000)

Marketing Staff - FTE 8; $452,000
Based on international tourism policies approved by the Under Secretary, the Office of the Assistant Secretary for Tourism Marketing is responsible for the development of marketing policy guidelines, the formulation and implementation of an annual marketing plan, and the supervision and tracking of Regional Office performance. It establishes working relationships with U.S. private, State and local tourism groups which allow the agency to enlist domestic U.S. cooperative advertising partners, provide technical assistance and training to the U.S. travel trade, and to hold joint Government/industry/State/city conferences aimed at communicating and coordinating U.S. promotional programs in key foreign markets. The Assistant Secretary's office oversees the development of cooperative advertising programs to ensure the maintenance of sufficient standards in the promotional messages placed in the foreign markets. The Office also develops marketing plans and recommendations for selected U.S. regional tourism destination areas to encourage and guide increased involvement in the agency's marketing efforts abroad. These recommendations and guidelines are delivered through U.S. travel industry-sponsored seminars.

Research Staff - FTE 5; $281,000
The Office of Research provides staff support and develops economic and marketing data required for program planning and evaluation in the public and private sector; assists in the strategic planning process of the agency; develops original and secondary market analyses in direct support of Departmental and agency objectives and strategies; provides planning input for, undertakes necessary research in support of, and advises on the direction and content of marketing programs contained in the Regional Marketing Plans; carries out tracking and periodic evaluation studies to assess the relative effectiveness of marketing activities; forecasts trends in U.S. international tourism; provides specialized information and ad hoc analyses as required; maintains a data bank of international travel information; and services over 5,000 travel industry requests for technical assistance and research information each year.

Policy Staff - FTE 4; $254,000
The Office of Policy provides support to the Under Secretary in the development of domestic and international tourism policies; legislative initiatives; and planning functions, including preparation of position papers on tourism issues and legislative proposals and related analyses, comments, and testimony. It provides staff support to the Tourism Policy Council and the Travel and Tourism Advisory Board including the preparation and distribution of their annual reports as required by law.

The Office interacts with other governmental policy offices, intergovernmental bodies, international organizations and the travel trade,. It also develops policy and planning strategies in the area of international travel and tourism agreements, and represents the Department as an official participant in bilateral and multilateral negotiations to reduce or eliminate impediments to tourism. The Office identifies policy options to improve the market climate in which the U.S. travel industry must operate by encouraging regions, States, and cities to become more active in the international tourism marketplace. This is done by reviewing the tourism impact of legislation proposed by Federal agencies or by outside interest groups and assessing regulations proposed or implemented by foreign governments or by other agencies of the U.S. Government.

Summary of Performance Data

Performance indicators are as follows:

	1984 Actual	1985 Estimate	1986 Estimate	1987 Estimate
No. cooperative advertising partners.....................	N/A	414	1,100	...
Cooperative advertising partners' contributions.........	N/A	$1.4 million	$7.3 million	...
Est. no. visitors generated by cooperative ad campaigns.	N/A	10,000	67,900	...
Est. tourism $ from coop. ad campaign-generated visitors	N/A	$19.9 million	$50 million	...
No. cooperative marketing program partners..............	N/A	420	420	...
Cooperative marketing program contribution..............	N/A	$1.7 million	$1.7 million	...
No. U.S. convention/visitors bureaus brought into foreign market promoting U.S. congress venues.........	N/A	20	20	...
No. congresses/conventions sold for U.S. venues.........	41	40	40	...
No. foreign convention attendees........................	37,350	50,000	30,000	...
Est. tourism earnings from foreign convention attendees.	N/A	$50 million	$34.1 million	...
Est. advertising value of media space generated.........	$104 million	$110 million	$110 million	...
No. journalists on familiarization tours................	1,165	1,130	1,200	...
No. travel agents on familiarization tours..............	470	380	400	...
No. travel literature shipments to sales outlets........	37,926	34,400	35,000	...
No. consumer inquiries serviced.........................	398,700	404,000	410,000	...
No. trade inquiries serviced............................	134,084	142,000	145,000	...
No. trade shows organized...............................	29	32	35	...
No. trade contacts/sales calls made.....................	28,584	29,500	30,000	...
No. U.S. ports serviced by receptionist program.........	13	13	13	...
No. educational/training workshops & seminars held......	106	106	110	...
No. foreign trade attendees at workshops/seminars.......	9,825	10,075	10,500	...
No. U.S. travel missions assisted.......................	41	55	60	...
No participants on travel missions......................	704	685	700	...
No. subscriptions and co-sponsors to in-flight survey...	65	100	125	...
No. research reports issued.............................	271	300	350	...
No. research/information requests serviced..............	5,000	5,000	5,000	...
No. major policy papers prepared........................	15	20	25	...
No. interagency tourism policy initiatives developed....	4	6	8	...
No. international tourism policy meetings attended......	3	4	5	...
No. bilateral/multilateral tourism agreements initiated.	2	3	4	...

Decreases for FY 1987
(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
International tourism development........................	68	$10,741	22	$3,600	-46	-$7,141
	(68)		(22)		(-46)	

The Administration proposes to phase out the USTTA program in FY 1987, since its functions can be performed by private, State and local tourism organizations. The budget requests a decrease of 68 positions (46 FTE) and $7,141,000 from the FY 1986 appropriation in the International Tourism subactivity. This funding level would provide necessary severance pay and other expenses to shut down programmatic operations and close all foreign offices.

The object class detail for this decrease follows:

	Positions	Amount
Full-time permanent..	-46	-$1,229
Other than full-time permanent............................	...	-8
Other personnel compensation...............................	...	-4
Total, personnel compensation.........................	-46	-1,241
Personnel benefits..		-395
Benefits for former personnel.............................		+1,249
Travel and transportation of persons....................		-216
Travel and transportation of things......................		+262
Communications, utilities and miscellaneous charges......		-670
Printing and reproduction....................................		-699
Other services..		-5,320
Supplies and materials..		-46
Equipment..		-65
Total..		-7,141

Justification of Program and Performance
(Dollar amounts in thousands)

Activity: Tourism
Subactivity: Executive direction

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Executive direction......................	12	$1,167	12	$1,259	12	$1,259	7	$423	-5	-$836

Goals and Objectives

The goal of USTTA Executive direction is to effectively direct and administer the Agency's efforts to increase international tourism to the United States. The objectives of this function are to: (1) develop and implement managerial policies; (2) provide strategic and tactical direction to USTTA marketing, research, and policy programs; (3) provide effective administrative support of agency operations; and (4) represent USTTA to Congress, Federal agencies and other governmental and private sector organizations.

1986 Program

USTTA's Executive direction is provided by the Office of the Under Secretary and the Office of Management and Administration. Together these offices provide strategic and administrative guidance and support to Headquarters and foreign operations. Resources required for centralized services are provided for in this subactivity.

HEADQUARTERS STAFF (FTE 12; $584,000)

Office of the Under Secretary FTE 8; $422,000
The Under Secretary of Commerce for Travel and Tourism, the principal spokesperson on the development of Federal tourism policy and programs, is responsible for the management and leadership of USTTA. The Under Secretary exercises the duties and responsibilities of the Secretary under the International Travel Act of 1961, as amended by the National Tourism Policy Act of 1981, and other authorities as delegated by the Secretary. The Under Secretary provides leadership at the national level to focus the attention and efforts of private, State and local tourism officials on increasing the numbers and spending of foreign tourists to the United States.

The Under Secretary for Travel and Tourism is responsible for directing USTTA activities; Executive Branch coordination; regional/State/city/industry/intergovernmental coordination and liaison; public relations activities; and Travel and Tourism Advisory Board activities.

The Under Secretary is assisted principally by the Deputy Under Secretary for Travel and Tourism and the Assistant Secretary for Tourism Marketing. The Deputy Under Secretary performs the functions of the Under Secretary in the latter's absence.

Office of Management and Administration - FTE 4; $162,000
The Office of Management and Administration serves as the primary administrative arm of the Office of the Under Secretary and the Assistant Secretary for Tourism Marketing. The office is responsible for the effective operation of USTTA's financial and personnel management programs. The office advises and assists in the development of overall policies in the areas of management and administration, including administrative support services, contract negotiations and administration, personnel, budgeting, and financial management. The office also serves as the Under Secretary's primary representative to the Offices of the Assistant Secretary for Administration and General Counsel, as well as liaison with the Office of Legislative Affairs in dealing with budgetary matters.

CENTRALIZED SERVICES FTE ...; $675,000

Centralized services consist of requirements such as accounting, personnel, and administrative support furnished by the Department of Commerce to USTTA offices located in Washington, and for single billing charges that are paid centrally. These services include GSA space rental, postal charges to USPS, telephone services, FTS, equipment rental, general administrative printing, office supplies, ADP services and equipment.

Decreases for FY 1987
(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Executive direction....................................	12 (12)	$1,259	7 (7)	$423	-5 (-5)	-$836

The Administration proposes to terminate the USTTA program in FY 1987, since its functions can be performed by private, State and local tourism organizations. The budget requests a decrease of 12 positions (6 FTE) and $836,000 from the FY 1986 appropriation in the Executive Direction subactivity. This amount is sufficient to shut down operations by September 30, 1987 and provide necessary severance pay and other expenses.

The object class detail for this decrease follows:

	Positions	Amount
Full-time permanent	-7	-$172
Other than full-time permanent	...	-12
Other personnel compensation	...	-2
Total, personnel compensation	-7	-186
Personnel benefits		-24
Benefits for former personnel		+20
Travel and transportation of persons		-35
Travel and transportation of things		-24
Communications, utilities and miscellaneous charges		-240
Printing and reproduction		-18
Other services		-279
Supplies and materials		-12
Equipment		-38
Total		-836

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc.(+) or Dec.(-) Pos.	Inc.(+) or Dec.(-) Workyears	Inc.(+) or Dec.(-) Amount	Emp. 12/31
11 Personnel compensation:										
11.1 Full-time permanent positions	80	78	$2,722	29	29	$1,321	-51	-49	-$1,401	74
11.3 Positions other than full-time permanent	...	2	27	...	...	7	...	-2	-20	...
11.5 Other personnel compensation	...	...	6	...	...	...	...	...	-6	...
Total personnel compensation	80	80	2,755	29	29	1,328	-51	-51	-1,427	74
Other objects:										
12.1 Personnel benefits civilian			562			143			-419	
13.0 Benefits for former personnel			...			1,269			+1,269	
21.0 Travel and transportation of persons			336			85			-251	
22.0 Transportation of things			102			340			+238	
23.1 Standard level user charges			150			40			-110	
23.3 Communications, utilities, and miscellaneous charges			1,000			200			-800	
24.0 Printing and reproduction			767			50			-717	
25.0 Other services			6,167			568			-5,599	
26.0 Supplies and materials			58			...			-58	
31.0 Equipment			103			...			-103	
Total requirements			12,000			4,023			-7,977	

Justification by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Object Class	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp.
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
11.1 Full-time permanent positions										
Executive level III	1	1	$74	1	1	$18	...	...	-$56	1
Senior executive service	4	4	265	1	1	181	-3	-3	-84	4
General schedule	44	42	1,788	20	20	973	-24	-22	-815	41
Foreign service nationals	31	31	595	7	7	149	-24	-24	-446	28
Total, permanent positions	80	78	2,722	29	29	1,321	-51	-49	-1,401	74
11.3 Positions other than full-time permanent	...	2	27	...	...	7	...	-2	-20	
11.5 Other personnel compensation			6			...			-6	
12.1 Personnel benefits										
Civil Service Retirement			200			69			-131	
Federal Insurance Contribution Act (FICA)			38			9			-29	
Health insurance			45			10			-35	
Life insurance			18			2			-16	
Employees' compensation			4			4			...	
Overseas allowance			257			49			-208	
Total, personnel benefits			562			143			-419	
13.0 Benefits for former personnel			...			1,269			+1,269	
21.1 Travel and transportation of persons										
Per diem			176			35			-141	
Air fare			121			50			-71	
Other common carrier			30			...			-30	
GSA motor vehicles			4			...			-4	
Mileage for privately owned vehicles			5			...			-5	
Total, transportation of persons			336			85			-251	

	1987 Base			1987 Estimate			Inc.(+) or Dec.(-)			Emp.
Object Class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
22.0 Transportation of things			$102			$340			+$238	
23.1 Standard level user charges			150			40			-110	
23.2 Communications, utilities, and miscellaneous charges										
Federal Telecommunications Systems			33			5			-28	
Other telephone, telegraph and teletype utilities			267			25			-242	
Other space rental			547			134			-413	
Postal services by USPS			50			15			-35	
Postal by other countries			75			15			-60	
Office copying equipment			10			2			-8	
Other equipment rental			18			4			-14	
Total, communications, utilities, and miscellaneous charges			1,000			200			-800	
24.0 Printing and reproduction			767			50			-717	
25.0 Other services										
Centralized departmental services			300			198			-102	
Other services			5,867			370			-5,497	
Total, other services			6,167			568			-5,599	
26.0 Supplies and materials										
Office supplies and materials			58			...			-58	
31.0 Equipment			103			...			-103	

United States Travel and Tourism Administration
Salaries and expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$24	$41	...
Management and professional services	...	...	...
Special studies and analysis	...	...	...
Management and support services for research and development	...	...	...
Amount withheld from obligation pursuant to P.L. 99-190	...	-4	...
Total	24	37	...

Consulting Services:

In FY 1986, consulting services will be used to provide expert advice and counsel on developing effective on-going procedures for contacting and soliciting financial support from the tourism industry for cooperative advertising programs. Advisory committees are used to advise the Secretary of Commerce on the implementation of the National Tourism Policy Act.

In FY 1987 the Administration proposes to phase out the USTTA program since its functions can be performed by private, State and local tourism organizations.

UNITED STATES TRAVEL AND TOURISM ADMINISTRATION
Salaries and Expenses

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	...	...	...	...
Pamphlets	588	950	628	...
Audiovisuals	...	250	...	...
Total	588	1,200	628	...

In FY 1986, USTTA plans to complete printing of foreign language versions of a series of 12 information folders on the United States for use by prospective foreign visitors from abroad. The languages will be Spanish, French, German, Italian, and Japanese. Also, a new film covering the United States initiated in FY 1985 will be released for use in USTTA markets abroad to motivate foreign visitors to travel to the United States. In FY 1987 the Administration proposes to phase out the USTTA program since its functions can be performed by private, State and local tourism organizations.

United States Travel and Tourism Administration
Salaries and Expenses

Average Grades and Salaries

	1985 Actual	1986 Estimate	1987 Estimate
Average ES Salary	$66,232	$66,232	$66,232
Average GS Grade	11.73	11.82	...
Average GS Salary	$40,927	$41,250	$49,000
Average Salary of Ungraded Positions	$17,357	$19,194	$21,286

Mr. DWYER. Ms. Tuttle, do you have a statement that you would like to present at this time?

STATEMENT OF DONNA F. TUTTLE, UNDER SECRETARY OF COMMERCE FOR TRAVEL AND TOURISM

Ms. TUTTLE. I do, Mr. Chairman. Thank you very much.

I appear before you today in support of the President's fiscal year 1987 budget request of $4,023,000. The President's budget reflects a proposal to terminate authorization for the USTTA effective October 1st, 1986. The slightly more than $4 million requested in the budget is necessary for the close-out of USTTA overseas operations and to support a small staff in Washington, D.C. to complete the close-out efforts.

While we recognize that successful activities directed to the promotion of international travel to the United States contribute to the nation's economy and to the balance of trade, fiscal necessity requires that we establish priorities among the many claims on the funds provided by the general taxpayer. In response to the problem of a severe Federal deficit, the Administration has decided to reduce or eliminate taxpayer support for those programs that it believes can be better carried out by private industry. Moreover, we believe that the strongest contribution the Federal Government can make to the health of American industry is to create the conditions necessary for broad economic expansion.

The travel and tourism industry, as well as State and local governments, have been increasing their efforts in the international tourism marketplace. The Department will continue to encourage this by doing everything possible through legislation or deregulation to free private enterprise from the restraints imposed by Government.

I would be happy to respond to any questions you may have.

[Statement of Ms. Tuttle follows:]

STATEMENT BY THE UNDER SECRETARY OF COMMERCE
FOR TRAVEL AND TOURISM
DONNA F. TUTTLE
BEFORE THE HOUSE APPROPRIATIONS COMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE AND STATE, THE JUDICIARY AND RELATED AGENCIES

Mr. Chairman and Members of the Committee:

I appear before you today in support of the President's Fiscal Year 1987 budget request of $4,023,000. The President's budget reflects a proposal to terminate authorization for the USTTA, effective October 1, 1986. The slightly more than $4 million requested in the budget is necessary for the close out of USTTA overseas operations and to support a small staff in Washington, D.C., to complete the close out efforts.

While we recognize that successful activities directed to the promotion of international travel to the United States contribute to the Nation's economy and to the balance of trade, fiscal necessity requires that we establish priorities among the many claims on the funds provided by the general taxpayer. In response to the problem of a severe Federal deficit, the Administration has decided to reduce or eliminate taxpayer support for those programs that it believes can be better carried out by private industry. Moreover, we believe that the strongest contribution the Federal government can make to the health of American industry is to create the conditions necessary for broad economic expansion.

The travel and tourism industry as well as state and local governments have been increasing their efforts in the international tourism marketplace. The Department will continue to encourage this by doing everything possible through legislation or deregulation to free private enterprise from the restraints imposed by government. I would be happy to respond to any questions you may have.

CLOSE-OUT

Mr. **Dwyer**. We have your statement, and you agree with the close-out?

Ms. **Tuttle**. I do.

Mr. **Dwyer**. Do you think it's necessary to have an office to oversee the close-out here in Washington? Why not just close it out and lock the door and walk away and make a real contribution to the deficit?

Ms. **Tuttle**. I think because of the fact that there are nine overseas offices, it would require some staff to close out the activities in the overseas markets.

Mr. **Dwyer**. In what way? Give me an example of what activity would be required.

Ms. **Tuttle**. Well, in each one of the markets—and especially in Germany—we have several activities that you have to plan for ahead of time; for instance, trade shows and road shows. And we would want to find someone to take over that coordination that would already be planned for 1987.

Mr. **Dwyer**. Why find someone to take it over? Why not just close it out? It would be a very dramatic effort in connection with the deficit reduction.

Ms. **Tuttle**. Because with closing the agency in Washington, certainly that doesn't mean that we would like to stop the activities going on in the overseas market. The foreign commercial service officer would probably be an appropriate person to handle the trade show or some of the activities in the overseas markets.

Mr. **Dwyer**. Well, you've been discussing closing out the agency, now, for the last couple of years, if I remember correctly. Is that who's going to take it over, the foreign commercial officer?

Ms. **Tuttle**. Well, there have been no concrete plans made on this effort, but that certainly would be one of the feasibilities that certainly exists.

Mr. **Dwyer**. What's the minimum amount of office staff that you could use here in Washington to effect this closeout? Somewhat less than $4 million?

Ms. **Tuttle**. We would need the entire $4 million for the 12 member staff to close-out activities by September 30, 1987.

Mr. **Dwyer**. What's the status of your authorization for 1987?

Ms. **Tuttle**. We have no authorization. There is a bill pending in the Senate from last year, but we are not authorized.

Mr. **Dwyer**. You're not seeking the passage of that bill at this time?

Ms. **Tuttle**. No. No.

Mr. **Dwyer**. Thank you. We will have some questions to send over to you. You may submit the answers for the record.

[Questions for the record follow:]

QUESTIONS FOR THE RECORD BY CONGRESSMAN DWYER

Fiscal Year 1986 Activities

QUESTION:

How are you managing to sustain the reduction of $516,000 related to the Gramm-Rudman sequestration?

ANSWER:

The United States Travel and Tourism Admisnistration has taken the $516,000 Gramm-Rudman reduction out of both International Tourism Development activities ($462 thousand) and Executive Direction ($54 thousand). These reductions were spread across the board among the various USTTA activities.

QUESTION:

Are you having to induce furloughs or RIF's as a result of this reduction?

ANSWER:

No, the reductions were taken in non-personnel areas of the budget.

QUESTION:

Will you have to submit a reprogramming in order to minimize the effects on your programs and personnel as a result of the Gramm-Rudman sequestration?

ANSWER:

No, we have been able to accommodate the reduction without the need for reprogramming.

QUESTION:

Could you sustain a similar reduction in fiscal year 1987 should Congress provide the same level of funding as that provided in Fiscal Year 1986?

ANSWER:

Yes, the United States Travel and Tourism Administration could sustain a similar reduction based upon the same level of funding as that provided in fiscal year 1986.

Fiscal Year 1987 Activities

QUESTION:

At what point during the year will you begin to reduce your personnel levels without an appropriation higher than you have requested?

ANSWER:

The United States Travel and Tourism Administration would have to begin RIF procedures on October 1, 1986, and reduce personnel by December 31, 1986.

QUESTION:

That is, when will you begin to reduce the levels of personnel you have on board in 1986 pursuant to the approach proposed by your FY 1987 budget request?

ANSWER:

The United States Travel and Tourism Administration does not anticipate any need to reduce staffing levels in FY 1986. All reductions would occur in FY 1987.

QUESTION:

During fiscal years 1984 and 1985, United States tourism enjoyed the benefits of increased gains as a virtue of the value of the dollar against foreign currencies. What would you estimate the additionality provided to U.S. tourism as a result of these gains?

ANSWER:

The dollar increased substantially in value against most major foreign currencies in the early 1980s, peaking in March 1985. Its expanded purchasing power benefitted outbound U.S. travelers, while dampening growth in inbound tourism from foreign visitors. As a result, the 1985 tourism deficit increased 20% from 1984, and 55% from 1983. Although many other economic, political, and marketplace developments affect travel consumption, statistics show a general inverse relationship between the value of the dollar relative to foreign currencies and international tourism receipts and payments.

Reflecting this influence, inbound tourism from other countries declined 4.1% in 1984, with most major European markets experiencing contractions. Similarly, U.S. receipts from these visitors also dropped slightly (by 0.1% in current dollars). Conversely, Americans traveling abroad to all countries in 1984 jumped 10%. Americans traveling to overseas destinations, excluding Canada and Mexico, increased 20%. Their expenditures on foreign travel rose 16%. The resulting travel dollar deficit widened by 55% over the 1983 imbalance.

In 1985, inbound tourism was fairly flat compared with 1984, as the dollar continued to lose strength during the latter nine months of the year. U.S. receipts from international visitors rose 2% to $14.1 billion. Although final data are not yet available on outbound travel, it is estimated that payments by Americans abroad totaled $24.4 billion, up 9%. The travel dollar deficit therefore stood at $10.3 billion, a record level, up 20% over 1984.

In 1986 and 1987, the situation should be reversed. A much-weaker U.S. dollar should encourage increased levels of foreign visitation to this country while deterring growth in U.S. travel abroad.

QUESTION:

In what sectors of the business economy were these gains enjoyed the most?

ANSWER:

Since most of the gains experienced were concentrated in the outbound market, those sectors of the travel industry servicing Americans going abroad benefitted the most--primarily the travel agency business and international airlines. On the other hand, "lost" business was felt by many industry segments as a result of American traffic diverted to foreign destinations and weak performance of the inbound market.

QUESTION:

How well did the tours put together by your foreign offices, generate the benefits that were enjoyed by the American economy as a result of increased foreign tourism in the U.S.?

ANSWER:

USTTA regional offices abroad do not directly put tours together. Our offices work with the tour operators and wholesalers who create tour programs and itineraries which are then sold by retail travel agencies to the consumers in the marketplace.

A principal objective of USTTA is to increase the numbers of States, cities and Tourism Industry firms marketing their products internationally.

QUESTION:

What level of additionality can you attribute this overall level of increased tourism to your efforts apart from the dollar's increased value against foreign currency?

ANSWER:

Due to the loss of purchasing power of other major currencies against the U.S. dollar from 1980 to early 1985, travel to this country became much more expensive and therefore less competitively attractive from a cost point of view. Given this, visitation from our major European markets experienced declines, not increases, during the past three years.

In a concerted effort to determine the "cause-and-effect" of USTTA promotional programs, USTTA has undertaken a comprehensive set of evaluation research studies. These studies will assess the marginal impact of specific cooperative print media advertising placements on readers' decisions to visit the USA. Studies are currently underway in four USTTA markets, including assessment of the major test promotional campaign in West Germany. Results will be available in late summer of this year.

QUESTION:

Given the declining value of the dollar against foreign currencies, don't you feel that your efforts are more needed at this point rather not as indicated by the budget request?

ANSWER:

A major problem of the United States today is that many of the country's industries, states, and cities are not competing internationally for business. This problem existed in the past and can be expected to exist in the future. In recognition of this, the Department of Commerce has cited "increases in the number ... of exporters", increases in the share of the international travel market", and "increases in U.S. exports of ... services" as key goals Department agencies should work to attain.

Consistent with these goals, USTTA is carrying out cooperative international marketing programs designed to stimulate states, cities and U.S. companies to promote their products and services overseas. USTTA cooperative advertising programs alone attracted over $2.1 million from more than 100 tourism organizations in FY1 985.

It will be important in the future to continue to carry out the types of cooperative promotional programs which reflect a trade strategy in the export of travel and tourism. This should be carried out by industry, states and cities whether or not the agency exists.

QUESTION:

If the United States and other Western countries efforts are successful in devaluating the dollar, don't you feel that your efforts in promoting U.S. tourism which create increased revenues to the United States are needed more now than ever?

ANSWER:

As I stated before, the answer lies in increased international competition by U.S. firms and cooperative marketing programs.

QUESTION:

Do you feel that the efforts generated by your Administration more than outweigh the costs of maintaining your Administration in terms of revenues and other business revenues generated?

ANSWER:

Results of USTTA's coupon conversion studies will be available in late 1986 indicating the impact the agency's programs have had during the year.

QUESTION:

What would you estimate the total cost of business generated by your efforts in fiscal year 1986?

ANSWER:

As indicated in the previous answer, USTTA's evaluation research program will enable an objective evaluation of the impact, effectiveness, and business generated as a direct result of the agency's promotional programs in FY 1986. However, full results will not be available until late summer; therefore, we are unable to provide an answer to this question at this time.

QUESTION:

What would you estimate those benefits would be in terms of overall gross revenues and tax revenues for fiscal year 1987 if we maintained your 1986 level of appropriation activity?

ANSWER:

Since FY 1986 results cannot yet be determined until late summer, it is impossible to project benefits which would accrue in FY 1987.

QUESTION:

Do you have an authorization for fiscal year 1987 activities?

ANSWER:

At this time, no.

QUESTION:

What is the status of that authorization?

ANSWER:

An authorization (S-374) has been introduced by Senator Pressler.

QUESTION FROM CONGRESSMAN BOB CARR

Question:

Tourism as a consumer item was one of the few trade items which in 1984 showed a $900 million trade surplus in favor of the United States. It is believed that 1985's estimate will be $1 billion. Additionally, the Department of Commerce stated that in 1984, Japanese visitors, for example, spent $1.3 billion in the United States, while Americans spent only $400 million in Japan.

Does this Administration consider tourism as a trade item? If yes, why would they not support the legislative mandate of USTTA to promote tourism dollars here in the United States?

Answer:

The Administration does consider tourism to be an important item of international trade and a significant source of U.S. export revenue.

At the same time however, the Administration believes that the States, cities and private sector can efectively promote the United States in the international travel market, and that it is not essential that there be a Federal agency to do so.

TUESDAY, MARCH 18, 1986.

PATENT AND TRADEMARK OFFICE

WITNESSES

DONALD J. QUIGG, ASSISTANT SECRETARY AND COMMISSIONER FOR PATENTS AND TRADEMARKS

RENE D. TEGTMEYER, ASSISTANT COMMISSIONER FOR PATENTS

MARGARET M. LAURENCE, ASSISTANT COMMISSIONER FOR TRADEMARKS

BRADFORD R. HUTHER, ASSISTANT COMMISSIONER FOR FINANCE AND PLANNING

JAMES R. LYNCH, DIRECTOR, OFFICE OF BUDGET, PLANNING AND EVALUATION

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER. The next agency whose budget we shall review within the Department of Commerce is the Patent and Trademark Office. Here to testify is Donald Quigg, the Assistant Secretary for Patents and Trademarks.

The 1987 budget request for the Patent and Trademark Office is $109,632,000, which represents an increase of $28,574,000 above the 1986 adjusted appropriation. The 1986 sequestration as a result of Gramm-Rudman is $3,642,000. In addition, the Patent and Trademark Office has a pending deferral proposal. At this point we will insert the justifications in the record, and Mr. Quigg, you may present your statement at this point.

[The justifications follow:]

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

Budget Estimates, Fiscal Year 1987
Congressional Submission

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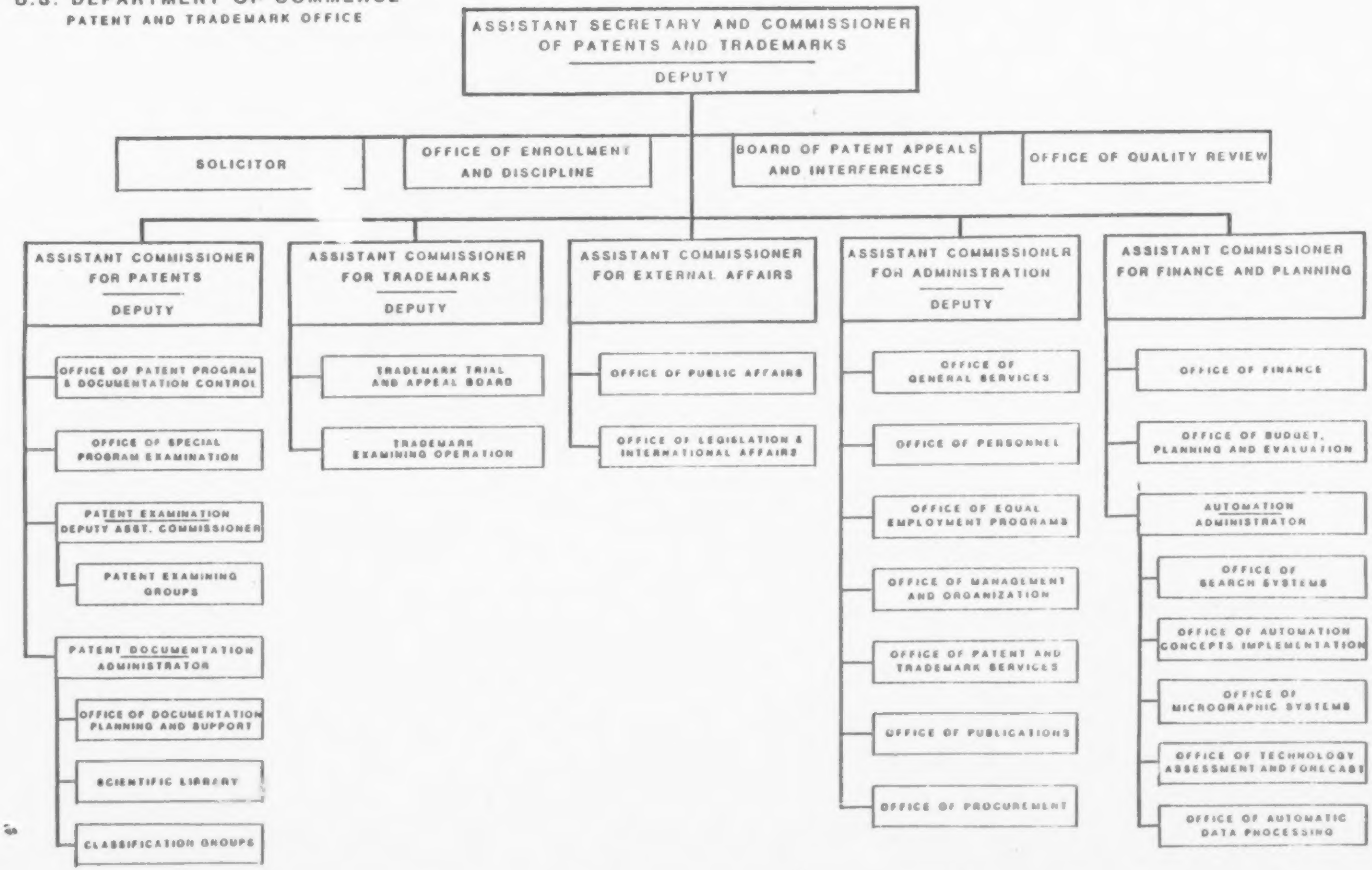
U.S. DEPARTMENT OF COMMERCE

PATENT AND TRADEMARK OFFICE


ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
DEPUTY
SOLICITOR
OFFICE OF ENROLLMENT AND DISCIPLINE
BOARD OF PATENT APPEALS AND INTERFERENCES
OFFICE OF QUALITY REVIEW
ASSISTANT COMMISSIONER FOR PATENTS
DEPUTY
OFFICE OF PATENT PROGRAM & DOCUMENTATION CONTROL
OFFICE OF SPECIAL PROGRAM EXAMINATION
PATENT EXAMINATION DEPUTY ASST. COMMISSIONER
PATENT EXAMINING GROUPS
PATENT DOCUMENTATION ADMINISTRATOR
OFFICE OF DOCUMENTATION PLANNING AND SUPPORT
SCIENTIFIC LIBRARY
CLASSIFICATION GROUPS
ASSISTANT COMMISSIONER FOR TRADEMARKS
DEPUTY
TRADEMARK TRIAL AND APPEAL BOARD
TRADEMARK EXAMINING OPERATION
ASSISTANT COMMISSIONER FOR EXTERNAL AFFAIRS
OFFICE OF PUBLIC AFFAIRS
OFFICE OF LEGISLATION & INTERNATIONAL AFFAIRS
ASSISTANT COMMISSIONER FOR ADMINISTRATION
DEPUTY
OFFICE OF GENERAL SERVICES
OFFICE OF PERSONNEL
OFFICE OF EQUAL EMPLOYMENT PROGRAMS
OFFICE OF MANAGEMENT AND ORGANIZATION
OFFICE OF PATENT AND TRADEMARK SERVICES
OFFICE OF PUBLICATIONS
OFFICE OF PROCUREMENT
ASSISTANT COMMISSIONER FOR FINANCE AND PLANNING
OFFICE OF FINANCE
OFFICE OF BUDGET, PLANNING AND EVALUATION
AUTOMATION ADMINISTRATOR
OFFICE OF SEARCH SYSTEMS
OFFICE OF AUTOMATION CONCEPTS IMPLEMENTATION
OFFICE OF MICROGRAPHIC SYSTEMS
OFFICE OF TECHNOLOGY ASSESSMENT AND FORECAST
OFFICE OF AUTOMATIC DATA PROCESSING

PTO-1

GENERAL STATEMENT

The Patent and Trademark Office (PTO) is charged with the mission of developing and administering both the patent and trademark laws of the United States and disseminating technological information disclosed in patents. The Office seeks to preserve the integrity of the U.S. patent system which promotes industrial and scientific progress and the Federal trademark system which promotes investment in business and protects consumers, thus strengthening the national economy.

Patent laws, which provide for granting inventors the right to exclude all others from making, using, or selling their inventions for 17 years, encourage technological and scientific advancement by providing incentives to create, invest in, and disclose new and useful ideas. PTO's primary role in administering these laws is to examine patent applications and grant protection for qualified inventions. In addition, PTO is responsible for collecting, assembling, publishing, and distributing technical information disclosed in patent grants and, by so doing, has created the world's largest scientific and technical reference library.

Trademark laws provide Federal registration and protection of names, symbols, or devices used by businesses to identify and distinguish goods and services offered to the public. Trademarks provide economic benefits by identifying the uniqueness, and integrity of the seller thereby reducing confusion of products and unfair competition. PTO examines trademark applications and grants Federal registration to owners of qualified marks.

Highlights of the 1987 budget submission to the Congress follow:

1. Continued progress in achieving the goal to reduce the time of patent application pendency to 18 months by 1987.

   The patent pendency reduction goal ("Plan 18/87") was initiated in FY 1982 and requires increased processing of patent applications each year until the end of 1987 when pendency will be reduced to 18 months. The 1987 budget request proposes a pendency time of 18.9 months, a reduction of 2.2 months from the 1986 goal of 21.1 months. In 1987, the Patent Examining Corps resources will decline, new patent examiner hires will be limited to critical attrition replacements only, and professional production will increase as prior year examiner hires progress along the learning curve. Pre-examination processing, printing support to the Examining Corps, and the Board of Patent Appeals and Interferences will be enhanced to respond to accelerated examiner production. Automated examiner search functions will be supported by the continued leasing of commercial data bases, initial operational deployment of in-house capability and the renovation of workstation areas.

2. Maintaining the time of trademark application pendency at three months to first action and 13 months to disposal (registration/abandonment).

   The trademark pendency reduction goals ("Plan 3/13") were achieved in 1985. Resource levels in 1987 will be used primarily to maintain the reduced pendencies and to realize the benefits from the automated system by enhancing the text editing and proofing of the document input into the data base. Initiatives for 1987 include further increases in the capabilities of the Automated Trademark System integrating the Search System with the TRAM 2 monitoring system.

The Trademark Trial and Appeal Board will be augumented to keep pace with the increased output of the Trademark Examination attorneys assuring continued responsiveness to the needs of the user community. The Automated Trademark Public Search Room established in 1986 to replace the existing paper search room will be run parallel to the paper file for 1987. This will insure that the needs of all concerned parties are adequately addressed before the paper file is eliminated.

3. Continued progress toward meeting the goal of automating the operations of the PTO by 1990.

The Automation Master Plan, mandated by Section 9 of P.L. 96-517, laid out a general blueprint to automate a majority of Office functions by 1990. The Plan was recently revised and updated and will be transmitted to the Congress via separate cover. The 1987 Automation initiatives reflect the directions established in the revised Plan. In 1984, PTO initiated the automation of the trademark process (T-SEARCH) and of the patent search process (Automated Patent System or APS) through contractual agreements. In 1985, the PTO completed T-SEARCH, continued the implemention of the APS in the pilot test of Examining Group 220, and initiated contracts and exchange agreements with the European and Japanese Patent Offices to capture the patent data base (Data Input/Output Systems or DIOS). In 1986, the PTO will continue progress in implementing and evaluating the APS test bed operations, capturing the patent data base in electronic form and maintaining the T-SEARCH and the TRAM 2 system. The 1987 increases will provide for the completion of the testbed evaluation and the initiation of the expansion of the APS and DIOS and the integration of trademark systems.

4. Financing From Prior Year Funds.

Reflected as an offset to the 1987 requirement for new spending authority is the carry-forward of $1,985,000 from 1986 into 1987. These funds were saved in the Patent Examination-Professional and Automation line items by the following events that were unanticipated at the time of the 1986 Request to Congress:

- Due to increased patent examiner productivity and changing patterns of attritions it proved unnecessary to fill 25 of the anticipated 150 new examiner positions in 1985. The full year savings in 1986 are $1,191,000.

- New computer space needed for the Automated Patent System (APS) was previously scheduled for acquisition on October 1, 1985. The current schedule is for acquisition on July 1, 1986. The resultant savings are $786,000.

- Consulting services were reduced by $8,000 under Public-Law 99-190 in 1986. The savings were from consulting services support in implementation of the Automation Master Plan.

These funds will be used in 1987 to augment the current 18/87 patent pendency reduction effort and Automation.

5. Increased user fee collections in 1987.

The PTO has revised its current fee schedule as directed by P.L. 97-247 for the 1986-1988 fee cycle. Patent fees have increased by the change in the Consumer Price Index for the prior three year period. Service fees have been adjusted to recover appropriate program costs for the 1986-1988 fee cycle period. Trademark fees have not been revised but will be adjusted by the beginning of FY 1987. The amounts reflected for trademark fees in this budget reflect full recovery of the cost of the trademark process.

Following is a comparison of the 1986 appropriation and the 1987 budget estimate and related data on current employment for the programs of the Patent and Trademark Office:

(Dollar amounts in thousands)

	Appropriation Currently Available		1987 Estimate		Inc. (+) or Dec. (-)		
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Emp. 12/31
Salaries and expenses..............	3,408	$220,179	3,401	$243,444	-7	+$23,265	3,064
Less reimbursements................	...	(200)	...	(200)	...	...	
Less offsetting fee collections....	...	-119,486	...	-131,827	...	-12,341	
Less financing from deferral of prior year fee collections into FY 1986..........................	...	-15,993	...	...	...	+15,993	
Less financing from deferral of FY 1986 funds into FY 1987..........	...	...	...	-1,977	...	-1,977	
Less financing from unobligated balance of FY 1986 funds into FY 1987..............................	...	...	...	-8	...	-8	
Appropriation requested............	3,408	84,700	3,401	109,632	-7	+24,932	

Note: Dollar amounts in parentheses represent fees for miscellaneous Federal reimbursements.

The 1987 program budget request of $243,444,000 is a net increase of $23,265,000 over the program budget level of $220,179,000 for 1986. Applying 1987 fee collections of $131,827,000 and prior year unobligated balances available of $1,985,000, the 1987 appropriation requested is $109,632,000. This is a net increase of $24,932,000 above the $84,700,000 currently available. Of the net increase of $24,932,000, $15,993,000 is specifically needed to offset the nonrecurring application in 1986 of "excess" fees accumulated during the first fee cycle.

The proposed 1987 changes to the 1986 revised appropriation by budget activity are:

Activity	Description	Permanent Positions	Amount
Adjustments to Base	Restoration of the proposed 1986 five percent pay cut costs; inflationary adjustments; other decreases	...	+$6,968
Patent Process	Augment Patent Board of Appeals and Interferences	+3	+67
	Reducing patent pendency	-60	-796
	Automation initiatives	...	+9,647
	Prepare examiner workstation area		+891
	Increase Patent Printing	...	+351
	Subtotal	-57	+10,160
Trademark Process	Maintain data base with enhanced text editing and proofreading	...	+296
	Augment Trademark Trial and Appeal Board	+4	+120
	Automation initiatives	...	+901
	Subtotal	+4	+1,317
Information Dissemination	Paper Trademark Public Search Room	+5	+322
	Expand microfilming of patent applications	...	+ 42
	Copy fulfillment system overhaul	...	+167
	Automation initiatives	...	-1,405
	Subtotal	+5	-874
Executive Direction and Administration	Automation initiatives	+32	+5,484
	Enhance Pre-Examination mail processing	+9	+ 210
	Subtotal	+41	+5,694
	Total Changes	-7	+23,265
Offsetting Fee Collections	1987 receipts	...	-12,341
Unobligated Balances	Financing From 1986 unobligated balances	...	-8
	Financing From 1986 Deferral	...	-1,977
	1986 Budget Authority Requirement Offset by Prior Year Receipts	...	+15,993
	Total Financing Changes	...	+1,667
	Net Changes	-7	+$24,932

Actual and projected key workload indicators are as follows:

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
1. Patent Process:				
Regular patent applications (excluding designs):				
Applications received..............	109,539	116,427	116,000	116,000
Application disposals..............	113,300	120,488	128,000	130,000
Total applications in Office (end of year)......................	240,304	237,197	227,187	212,757
Patent grants printed..............	67,214	70,244	74,640	79,000
Total pendency in Office (in months).......................	25.0	23.2	21.1	18.9
2. Trademark Process:				
Trademark applications:				
Applications received (including extra classes)......	61,480	64,677	66,800	68,800
Application disposals by Examiners.....................	82,130	86,318	66,800	68,800
Total applications in Office (end of year)..................	106,585	76,362	76,362	76,362
Trademark registrations printed..	45,475	63,122	44,200	45,600
Pendency to first action (in months)....................	5.3	2.6	3.0	3.0
Pendency to Disposal (in months)....	19.1	13.8	13.0	13.0

Activity/Subactivity Change Crosswalk
(Dollar amounts in thousands)

Format of Fiscal 1986 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Salaries and expenses:	
Patent Process:	$152,290
Examination-professional..................	113,821
Examination-clerical.....................	15,922
Appeals [1]..............................	3,454
Interferences [1]........................	1,161
Patent printing..........................	17,932
Trademark Process:	14,607
Examination of trademarks................	12,459
Trial and Appeal Board...................	1,458
Trademark printing.......................	690
Information Dissemination:	42,169
Customer services........................	12,384
Publication services.....................	3,983
Data & document retrieval systems.........	25,802
Executive Direction and Administration:	34,378
Commissioner.............................	549
Solicitor................................	1,649
Legislation & international affairs.......	1,173
Management planning......................	2,404
Administrative services..................	6,742
Automation...............................	20,757
Quality review...........................	1,104
Total....................................	243,444

Format of Fiscal 1987 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Salaries and expenses:	
Patent Process:	$152,290
Examination-professional..................	113,821
Examination-clerical.....................	15,922
Appeals and Interferences.................	4,615
Patent printing..........................	17,932
Trademark Process:	14,607
Examination of trademarks................	12,459
Trial and Appeal Board...................	1,458
Trademark printing.......................	690
Information Dissemination:	42,169
Customer services........................	12,384
Publication services.....................	3,983
Data & document retrieval systems.........	25,802
Executive Direction and Administration	34,378
Commissioner.............................	549
Solicitor................................	1,649
Legislation & international affairs.......	1,173
Management planning......................	2,404
Administrative services..................	6,742
Automation...............................	20,757
Quality review...........................	1,104
Total....................................	243,444

[1] A reorganization combined these two offices into the Board of Patent Appeals and Interferences.

Appropriation Language and Code Citations

1. For necessary expenses of the Patent and Trademark Office,

15 U.S.C. 1051-1127
15 U.S.C. 1511
35 U.S.C. 1-4, 6-42, 376
44 U.S.C. 1337-1338

15 U.S.C. 1051-1127 contains provisions of the Trademark Act of 1946 which govern the administration of the Trademark registration system of the Patent and Trademark Office.

15 U.S.C. 1511 states that the Patent and Trademark Office is under the jurisdiction and supervision of the Department of Commerce.

35 U.S.C. 1-4, 6-42 contains basic authorities for administration of patent laws, derived from the Act of July 19, 1952, and subsequent enactments. Revenues from fees are available to the Commissioner to carry out, to the extent provided for in appropriation acts, the activities of the Office. Since fiscal year 1983, all fees are available to the Patent and Trademark Office.

35 U.S.C. 376 authorizes the Patent and Trademark Office to charge international fees for activities undertaken pursuant to the Patent Cooperation Treaty.

44 U.S.C. 1337-1338 contains authority to print patents, trademarks, and other matter relating to the business of the Office.

2. including the defense of suits instituted against the Commissioner of Patents and Trademarks,

No specific authority

5 U.S.C. 3106 reads in part: "Except as otherwise authorized by law, the head of an Executive department or military department may not employ an attorney or counsel for the conduct of litigation in which the United States, an agency, or employee thereof is a party, or is interested, or for the searching of evidence therefore,...."

3. $109,632,000, and, in addition, such fees as shall be collected pursuant to 15 U.S.C. 1113 and 35 U.S.C. 41, 376,

15 U.S.C. 1113(a) provides that: "The Commissioner of Patents and Trademarks will establish fees...for the registration of a trademark or other mark and for all other services performed by and materials furnished the Patent and Trademark Office related to trademarks and other marks."

35 U.S.C. 41(a) provides that: "The Commissioner of Patent and Trademarks will establish fees for the processing of an application for a patent,...for maintaining a patent in force, and for providing all other services and materials related to patents."

35 U.S.C. 42(c) provides that: "Revenues from fees will be available to the Commissioner of Patents and Trademarks to carry out, to the extent provided for in appropriation Acts, the activities of the Patent and Trademark Office."

35 U.S.C. 376 authorizes the payment to the Patent and Trademark Office of international fees collected pursuant to the Patent Cooperation Treaty.

4. to remain available until expended.

No specific authority

31 U.S.C. 718 provides that: "No specific or indefinite appropriation...shall be construed to be permanent or available continuously without reference to a fiscal year...unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the appropriation Act in which it is contained makes provision."

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Page No.	Summary of adjustments to base and built-in changes	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available 1986:				
	General Fund	3,408	[$ 84,700]	3,408	$ 84,700
	Fee Collections		[119,486]		119,486
	Financing from prior year deferral		[15,993]		
	1985 Additional fee collections available		[4,240]		
	1985 Unobligated Balance		[5,665]		
	Total available funds		[230,084]		
	Less deferral into 1987		[-1,977]		
	Less estimated unobligated balances end of 1986		[-8]		
	Total obligations for 1986		[228,099]		
PTO-14	Adjustments to base and built-in changes:				
	Financing from prior year deferral	...	+15,993		
	Other increases	...	+7,031		
	Other decreases	...	-63		
	Subtotal, adjustments to base and built-in changes			...	+22,961
	1987 Base			3,408	227,147

Amounts in brackets [] refer only to 1986 resources.

Comparison by Activity	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) From 1987 Base Perm Pos.	Inc.(+) or Dec.(-) From 1987 Base Amount
PTO-18 **Patent Process:**										
Examination-professional	1,659	$94,752	1,519	$100,701	1,519	$104,079	1,462	$113,821	-57	+$9,742
	(1,404)	(90,154)	(1,490)	(102,773)	(1,490)		(1,390)		(-100)	
Examination-clerical	487	14,024	526	15,130	526	15,922	523	15,922	-3	...
	(476)	(13,693)	(544)	(16,123)	(550)		(550)		(...)	
Appeals and Interferences	83	4,532	83	4,368	83	4,548	86	4,615	+3	+67
	(72)	(4,290)	(79)	(4,697)	(79)		(81)		(+2)	
Patent printing	...	17,916	...	17,620	...	17,581	...	17,932	...	+351
		(15,458)		(16,216)						
Subtotal	2,229	131,224	2,128	137,819	2,128	142,130	2,071	152,290	-57	+10,160
	(1,952)	(123,595)	(2,113)	(139,809)	(2,119)		(2,021)		(-98)	
PTO-29 **Trademark Process:**										
Examination of trademarks	230	11,400	232	10,869	232	11,262	232	12,459	...	+1,197
	(231)	(10,612)	(225)	(12,515)	(225)		(225)			
Trial and Appeal Board	30	1,316	30	1,317	30	1,338	34	1,458	+4	+120
	(32)	(1,316)	(30)	(1,514)	(30)		(33)		(+3)	
Trademark printing	...	1,421	...	690	...	690	...	690		...
		(1,095)		(499)						
Subtotal	260	14,137	262	12,876	262	13,290	266	14,607	+4	+1,317
	(263)	(13,023)	(255)	(14,528)	(255)		(258)		(+3)	
PTO-37 **Information Dissemination:**										
Customer services	115	10,087	121	11,608	121	11,853	126	12,384	+5	+531
	(127)	(10,241)	(125)	(11,851)	(129)		(133)		(+4)	
Publication services	101	3,157	119	3,767	119	3,983	119	3,983	...	...
	(79)	(3,308)	(112)	(3,863)	(115)		(115)			

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-) From 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount
Comparison by Activity:										
Data & document retrieval systems	281	$21,591	281	$26,658	281	$27,207	281	$25,802	...	-$1,405
	(262)	(20,207)	(289)	(27,479)	(289)		(289)			
Subtotal	497	34,835	521	42,033	521	43,043	526	42,169	+5	-874
	(468)	(33,756)	(526)	(43,193)	(533)		(537)		(+4)	
PTO-45 Executive direction and administration:										
Commissioner	9	496	9	531	9	549	9	549	...	...
	(11)	(517)	(9)	(492)	(9)		(9)			
Solicitor	25	1,524	25	1,591	25	1,649	25	1,649	...	...
	(25)	(1,445)	(24)	(1,591)	(24)		(24)			
Legislation & international affairs	24	1,109	24	1,128	24	1,173	24	1,173	...	...
	(22)	(1,342)	(23)	(1,179)	(23)		(23)			
Management planning	49	2,314	47	2,309	47	2,404	47	2,404	...	...
	(45)	(2,395)	(48)	(2,374)	(48)		(48)			
Administrative services	180	6,607	182	6,272	182	6,532	191	6,742	+9	+210
	(193)	(7,178)	(215)	(6,744)	(214)		(223)		(+9)	
Automation	151	16,322	194	14,583	194	15,273	226	20,757	+32	+5,484
	(156)	(15,456)	(186)	(17,128)	(195)		(219)		(+24)	...
Quality review	14	932	16	1,037	16	1,104	16	1,104	...	...
	(15)	(878)	(15)	(1,061)	(16)		(16)			
Subtotal	452	29,304	497	27,451	497	28,684	538	34,378	+41	+5,694
	(467)	(29,211)	(520)	(30,569)	(529)		(562)		(+33)	

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-) From 1987 Base	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount
	Comparison by Activity:										
	Total requirements........................	3,430 (3,150)	$209,500 (199,585)	3,400 (3,414)	$220,179 (228,099)	3,400 (3,436)	$227,147	3,401 (3,378)	$243,444	-7 (-58)	+$16,297
PTO-72	Offsetting fee collections................		-107,289 (-97,383)		-119,486 (-125,451)		-119,486		-131,827		-12,341
	Financing from deferral of prior year funds......................................		...		-15,993 (-15,993)		...		-1,977		-1,977
	Financing from unobligated balance of prior year funds..........................		...		...		...		-8		-8
	Additional fee collections applied to 1985.......................................		-2,052 (-2,052)		...		...		...		...
	Appropriation requested....................		100,159 (100,150)		84,700 (86,655)		107,661		109,632		+1,971

Note: Permanent position amounts in parentheses represent workyears. Dollar amounts in parentheses represent obligations.

Justification of Adjustments to Base and Built-in Changes

(Dollar amounts in thousands)

	Perm. Pos.	Amount
1986 Fee Collections:		
Fee collections proposed in 1986 budget request	...	+$119,486
Financing from from prior year:		
Proposed deferral and estimated 1986 unobligated balances	...	+1,985

A one-time deferral of $1,977,000 is proposed in 1986 to be used to offset funding in 1987. The proposed funds are composed of $786,000 from equipment space savings caused by delay in acquiring new leased space for automation equipment and $1,191,000 from annualized salary savings incurred in 1986 by not hiring 25 new patent examiners in 1985. In addition, $8,000 is included from decreased consultant services, pursuant to Section 515 of the Treasury and Postal Appropriation Act, 1986.

	Perm. Pos.	Amount
Program funded from prior years fee collections:		
Prior year fee collections deferral	...	+15,993

In 1986, this amount was proposed to Congress as a one-time offset to direct appropriations. This adjustment is required to restore the direct base program funding level in 1987.

	Perm. Pos.	Amount
Other Increases:		
Restoration of the proposed 5% pay cut	...	+$4,745
Full-year cost in 1987 of positions financed for part year in 1986	...	+542
Within-grade step increases	...	...
Health insurance premiums	...	+63
Employee benefits	...	+472
Rental payments to GSA	...	+638
Federal Telecommunications System	...	+20
Postage rates	...	+110
Overtime utilities	...	+58
ADP equipment rental	...	+32
Working Capital Fund	...	+165
Maintenance of equipment	...	+112
Supplies and materials	...	+74
Subtotal, other increases	...	+$7,031

Restoration of the 5% pay cut

The request of $4,745,000 is to restore the proposed 5 percent pay reduction in Federal employee salaries in 1986 as a part of the President's Deficit Reduction Program. The increase will allow funding to be maintained at the current salary rate. This amount was funded on a one-time basis in 1986 from excess 1985 fee collections and unobligated balances as directed by Congress.

Full-year cost in 1987 of positions financed for part year in 1986

An additional $542,000 is required in 1987 to cover full-year cost of positions financed for part year in 1986. The lapsed funds are for twenty-two staff years. This provides full-year financing with a five percent lapse.

Within-grade step increases

The cost of $866,000 for within-grade step increases is calculated as follows:

A. Estimated number of within-grade step increases scheduled	1,336
B. Step increases not earned due to turnover	137
C. Average step above step 1 per seperation	3
D. Average cost per within-grade step increase	$861
E. Gross cost of scheduled step increases (1,336 x $861)	$1,150,296
F. Less savings due to seperations (137 x 3 x $861)	-353,871
Subtotal, personnel compensation	$796,425
Personnel benefits at 8.78 percent	+69,926
Total cost	$866,351
Amount absorbed	-866,351
Total adjustment	...

Health insurance premiums

The Government's contribution to Federal employees' health insurance premiums increased effective the first pay period in January 1985. The bi-weekly Government's contribution increased from $23.58 to $23.93 for a self-only and from $52.29 to $53.36 for a family enrollment. Based on an internal survey of health insurances participants, the cost has increased by $63,000 over the 1986 base of $3,129,000.

Employee benefits

Effective January 1, 1984, amendments to the Social Security Act brought new Federal employees into the Social Security System and increased the tax rates. The increase of $472,000 provides $24,000 for the Medicare increase, $27,000 for increased pay ceiling under OASDI and $421,000 for new employees covered under the Social Security System.

Rental payments to GSA

The increased cost of rental payments to GSA is $638,000. The increase represents a 3.9 percent increase to the base of $16,514,000.

Federal Telecommunications System (FTS)

The increase of $20,000 in Federal Telecommunications System charges is based on a rate increase (GNP deflator) on the fiscal year 1986 estimate of $550,000.

Postal rates

Postal rates, overall, increased by 9.5 percent. The $110,000 increase is computed on the 1986 estimate of $1,154,000.

Overtime utilities

An increase of $58,000 is requested for overtime utilities. The request is an increase from 1984 to 1985 of $16.87 per hour for an overtime base of 3,466 kilowatt hours covering three office buildings and is based on estimates from the General Services Administration. The increase represents a 20.7 percent increase over the 1986 estimate of $280,000.

ADP equipment rent

The increased cost of rental of ADP equipment is $32,000. The increase of 36 percent over the contract base of $89,000 represents the higher cost of leasing services for specific major computer items from 1984 to 1985.

Working Capital Fund, GA

This request funds cost increases in the Departmental Working Capital Fund to maintain their current level of operations. This includes items which are beyond the control of the Department. The increase requested is $165,000.

Maintenance of equipment

The increased cost for ADP equipment maintenance is $112,000. The increase of 39.9 percent over the base of $281,000 reflects higher costs for maintenance services for specific computer hardware items from FY 1984 to FY 1985.

Supplies and Materials

The increased cost of $74,000 for supplies and materials includes $41,000 for office supplies and $33,000 for scientific/technical publications and journals.

Economy measures have been initiated. However, office supply costs increased an average of 4.7 percent from 1984 to 1985. The estimate is based on a sample of fifty-seven of the most frequently ordered items by the Office from the Federal supply list and private vendors. The increase of $41,000 is 4.7 percent over the 1986 base of $865,000.

Maintaining a Scientific Library with up-to-date literature is crucial to the patent program. The patent examination process requires researching prior art to determine application claim validity using scientific and technical literature as well as patents to ensure issuance of quality patents. The increase of $33,000 is 7.3 percent over the base of $453,000.

Other Decreases:

	Perm. Pos.	Amount
Employees' Compensation Fund	...	-$27
Non-recurring equipment purchase	...	-36
Subtotal, other decreases	...	-63

The decrease of $27,000 in the repayment to the Employees' Compensation Fund is the result of lower costs in the year ending June 30, 1985 than in the year ending June 30, 1984. The 1985 charges will be reimbursed to the Department of Labor, Employees' Compensation Fund in 1987 pursuant to Public Law 86-767, as amended.

The decrease of $36,000 represents the one-time cost in 1986 for replacement of word processing equipment.

Activity: Patent Process

Justification of Program and Performance
(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-) From 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Examination-professional.....	1,659	$94,752	1,519	$100,701	1,519	$104,079	1,462	$113,821	-57	+$9,742
	(1,404)	(90,154)	(1,490)	(102,773)	(1,490)		(1,390)		(-100)	
Examination-clerical.........	487	14,024	526	15,130	526	15,922	523	15,922	-3	...
	(476)	(13,693)	(544)	(16,123)	(550)		(550)		(...)	
Appeals and Interferences....	83	4,532	83	4,368	83	4,548	86	4,615	+3	+67
	(72)	(4,290)	(79)	(4,697)	(79)		(81)		(+2)	
Patent printing..............	...	17,916	...	17,620	...	17,581	...	17,93[illegible]	...	+351
		(15,458)		(16,216)						
Subtotal..................	2,229	131,224	2,128	137,819	2,128	142,130	2,071	152,290	-57	+10,160
	(1,952)	(123,595)	(2,113)	(139,809)	(2,119)		(2,021)		(-98)	
Offsetting fee collections...		-66,738		-69,788		-69,788		-77,603		-7,815
		(-59,613)		(-72,715)						
Financing from deferral of prior year funds...........		...		-12,348		...		-1,977		-1,977
				(-12,348)						
Net Request..................		64,486		55,683		72,342		72,710		+368
		(63,982)		(54,746)						

Goals

Reduce patent pendency to 18 months by 1987 and improve patent quality.

Encourage innovation through the efficient administration of patent laws enacted by Congress in accordance with Article 1, Section 8 of the Constitution, thus enhancing the economic, scientific and competitive strength of the nation.
Issue valid patents promptly and provide for the rapid dissemination of new technology.
Automate the Patent and Trademark processes by 1990.

Objectives

Reduce patent pendency to 18 months by the end of 1987 and improve patent quality:

- Ensure the prompt issuance of printed patents, which (1) results in the rapid dissemination of new technology; (2) encourages early investment in innovation; and (3) accelerates technological development.

- Provide prompt and efficient services to the public, including the adjudication of motions before PTO's Board of Patent Appeals and Interferences.

Continue implementation of PTO's Automation Master Plan, which will result in the automation of patent examining group operations.

Base Program

The examination of patent applications determines the patentability of claimed inventions. Based on searches of prior art (previous U.S. and foreign patents, technical literature and reports) and on the application of statutory decisions, patent examiners either allow or reject an application, make holdings of abandonment, institute interference proceedings to determine priority of ownership, and rule on certain other interference motions. The Board of Appeals and the Board of Interferences were consolidated into a single Board of Patent Appeals and Interferences by Public Law 98-622, effective February 8, 1985. The Board reviews disputed examiner decisions and adjudicates questions regarding priority of invention. The decisions of the Board are subject to review: disaffected parties may institute civil action against the Commissioner in the U.S. District Court for the District of Columbia or appeal to the Court of Appeals for the Federal Circuit. These activities directly support the goal to "Reduce patent pendency to 18 months by 1987 and improve patent quality." (See PTO-28 for a flow chart on the patent examination process.) In 1987, this function includes funding for patent automation as outlined in the updated Automation Master Plan, which directly supports the goal to "Automate the Patent and Trademark processes by 1990."

Summary of Workload and Performance Data

Regular Patent Applications (excluding designs):	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Applications in Office (start-of-year)	243,465	240,304	237,197	227,187
Applications received	109,539	116,427	116,000	116,000
Application disposals by examiners:				
Allowed for grant	-69,987	-75,405	-79,000	-81,000
Abandoned	-43,313	-45,083	-49,000	-49,000
Total	-113,300	-120,488	-128,000	-130,000
Change in printing inventory	+600	+954	+1,990	-430
Total applications in Office (end-of-year)	240,304	237,197	227,187	212,757
First actions	118,256	128,968	132,600	120,000
Pendency in office, excluding appeals and interference applications (in months)	24.5	22.7	20.6	18.4
Total pendency in Office, all applications (in months)	25.0	23.2	21.1	18.9
Patent printing:				
Certificates of correction processed	7,364	9,016	8,000	8,000
Certificates of correction printed	5,543	7,728	7,600	7,600
Patent grants obligated (excludes designs)	67,506	71,975	75,500	79,000
Patent grants printed (excludes designs)	67,214	70,244	74,640	79,000
Design Patents:				
Applications received	8,446	9,504	8,200	9,000
Allowed or abandoned	7,571	8,233	7,500	7,700
Design patent grants printed	4,935	5,058	4,800	5,000
Total pending end-of-year	20,139	23,005	23,705	25,005
First actions	7,439	8,644	7,500	7,700
Appeals:				
Cases received	4,553	4,812	4,800	4,600
Cases disposed	3,716	3,692	3,900	5,000
Pending end-of-year	5,898	7,018	7,918	7,518
Interferences:				
Cases received	192	159	190	190
Cases disposed	245	206	230	230
Pending end-of-year	367	320	280	240

Changes for Fiscal Year 1987

The changes shown in this request reflect the final year of a six year integrated plan to revitalize the Patent and Trademark Office. The principal thrust of the plan, as it applies to the Patent Process, is production enhancement - through new hires and union contract incentives - and the associated pendency reduction. The increases contained in the patent pendency reduction plan have been formulated to improve each of the three stages of processing (pre-examination, examination, and post-examination) in a balanced manner that ties the capacity of each succeeding stage to the output of its predecessor.

	FY 1982	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987
Patent pendency (excluding appeals and interference applications)	23.7 mo.	25.0 mo.	24.5 mo.	22.7 mo.	20.6 mo.	18.4 mo.
Total pendency	24.2 mo.	25.5 mo.	25.0 mo.	23.2 mo.	21.1 mo.	18.9 mo.

(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Examination - Professional..............	1,519	$104,079	1,462	$113,821	-57	+$9,742
	(1,490)		(1,390)		(-100)	

Examination
The PTO requests a decrease of 57 permanent positions, 100 FTE and $484,000 for the Patent Professional Examining Corps. The request reflects increased examiner productivity, which has emerged as a result of both the enhanced awards program and higher productivity from new examiners hired between 1982 and 1985. The 100 FTE reduction reflects 90 hires to offset 90 projected attritions in 1987, and shifts in the 1985 and 1986 examiner staffing patterns which management has pursued in a controlled effort to stabilize the staff levels once the pendency goal is achieved. The 1987 budget represents the second year in which the effects of "deceleration" and increases in production capacity are shown. The need for fewer FTE than originally thought necessary reflects management's continuing efforts to limit program size.

The projected examiner staffing will produce 125,000 production units in 1987, a decrease of 5,300 units or 4.1% below the 1986 budget. Production units represent the average of first actions plus disposals. Excluding appeals and interferences, pendency will be 18.4 months.

In 1988 and beyond the PTO will strive to maintain the most cost effective balance of resources and production while maintaining the lowest practical period of pendency.

Included in this level is $1,977,000 in prior year funds which are being applied to examiner overtime in 1987.

Patent Automation

The PTO requests an increase of $10,226,000 for automation initiatives. The requested increase includes the following:

	Perm Pos.	FTE	Amount
Commercial data bases....................	...	...	-$312,000
Environmental conditioning of work space	...	...	+891,000
Patent process automation...............	...	...	+9,647,000
Total.........................	...	...	$+10,226,000

Specifics of the request follow:

- Commercial Data Bases

A net decrease of $312,000 is requested in 1987 to fund the projected full year cost of the Examining Corps share of centralized commercial data base search contracts. This decrease of $312,000 is the net of a reduction of $612,000 from the termination of access to the Meade data base and an increase of $300,000 for other commercial data bases. Termination of the Meade contract is made possible by the provision of in-house services through the deployment of electronic searching in the Automated Patent System (APS). The commercial data base program provides examiners with on-line access to data bases containing scientific and technical literature, chemical structures, foreign patents, and U.S. patents, with quick, comprehensive retrieval of relevant information. The program improves the quality of searches for prior art by providing access to publications not in the examiners' search files or normal field of search. Improved quality results in stronger patents, ultimately reducing costs to the private sector.

- Environmental Conditioning of Examiner Work Space

The implementation of the Automated Patent System (APS) will include installation, operation and maintenance of electronic workstations. The APS contract provides for the examiner workstations as well as for the ergonomic considerations related to displays, keyboards, and their housing. The contract does not address workstation furnishings, ambient lighting, air conditioning, and electrical power which affect the examiner's automated work space. Automation of the PTO must include proper machine-operator interfaces. An increase of $891,000, along with base funding of $679,000, is requested to provide funding for environmental conditioning of examiner work space in FY 1987. Total funds of $1,570,000 will be used to prepare workspace for 180 image workstations and 200 text terminals. Due to procurement and construction lag times, many of these workstations will not be installed until FY 1988. Preparation costs include dedicated circuits for power, feeder equipment, air conditioning equipment, and architectural modifications.

- **Patent Process Automation**

The PTO requests an increase of $9,647,000 to fund automation initiatives designed to improve the quality of patent processing by automating the search and retrieval functions of examination. Since the systems listed below will benefit the Patent Process, resources for these initiatives are requested in this activity to reflect more accurately the true requirements of patent processing. This increase is consistent with the PTO's revised Automation Master Plan. The original Master Plan was developed in compliance with Section 9 of P.L. 96-517.

The 1987 estimate is composed of the following systems which are explained in detail in the Automation Summary section of Executive Direction and Administration, and the Revised Automation Master Plan:

	1987 Base	Change	1987 Estimate
Patent Process Automation	Amount	Amount	Amount
Patent Automation (APS)	$10,082,000	+$7,914,000	$17,996,000
Data Base Automation (DIOS)	4,016,000	+1,933,000	5,949,000
ADP Support Systems	700,000	-200,000	500,000
Total Patent Process Automation	$14,798,000	+$9,647,000	$24,445,000

The PTO established the following guidelines for modification of the Automation Master Plan:

- First priority will be given to implementing system functions and features that contribute to improvement of patent quality, including:
  - establishing and maintaining full integrity electronic data bases, and
  - deploying electronic search and retrieval capabilities to the Patent Corps.
- Second priority will be given to installation of cost effective and/or productivity improvement system capabilities including:
  - reducing or eliminating paper search file maintenance,
  - using Optical Character Recognition (OCR) techniques to convert newly allowed patents to electronic form with maximum automated composition for display and photocomposition,
  - converting the Classification and Search Support Information System (CASSIS) and the Patent Classification Data System (CDS) to operate with the Automated Patent System (APS) data bases and computers, and
  - replacing current patent copy sales techniques.
- Desirable but more costly or difficult to install system features, such as application maintenance, will be deferred until the higher priority capabilities have been deployed and the expansion features have been more thoroughly evaluated in the testbed environment.

Using these revised guidelines, current and outyear funding projections for Patent Process Automation are (dollar amounts in thousands):

	1986 Amount	1987 Amount	1988 Amount	1989 Amount	1990 Amount	1991 Amount
Base	$10,406	$14,798	$24,445	$38,257	$43,220	$44,798
Projected Adjustments to Base	...	...	+ 740	+ 348	+ 258	+ 348
Changes	+4,392	+9,647	+13,072	+4,615	+1,320	-1,963
Total	14,798	24,445	38,257	43,220	44,798	43,183

The revised Automation Master Plan, which supports the program increases of $891,000 for environmental conditioning of examiner work space, and $9,647,000 for Patent Process Automation, will be submitted to the Congress under separate cover.

The position and object class detail follows:

Position Title	GS-Grade	Number	Annual Salary
Patent examiner..........................	15	+5	+$261,310
Patent examiner..........................	14	+26	+1,155,180
Patent examiner..........................	13	+71	+2,669,529
Patent examiner..........................	12	-44	-1,391,236
Patent examiner..........................	11	-28	-738,668
Patent examiner..........................	9	-102	-2,446,470
Patent examiner..........................	7	+6	+124,764
Patent examiner..........................	5	+9	+159,750
Total Salaries..........................		-57	-205,841
Less: Lapse.............................		-43	-46,159
Total Permanent Compensation............		-100	-252,000
Other personnel compensation............		-16	-457,000
Total Compensation......................		-116	-709,000
Personnel benefits......................			-43,000
Travel..................................			+27,000
Communications, utilities and other rent..			-76,000
Printing and reproduction...............			+301,000
Other services..........................			+10,224,000
Supplies and materials..................			-75,000
Equipment...............................			+93,000
Total...................................			+$9,742,000

The Patent Examiner staffing changes above reflect only changes resulting from normal promotions and attrition.

Changes for FY 1987
(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Examination-Clerical	526 (550)	$15,922	523 (550)	$15,922	-3 (...)	...

A decrease of nine permanent positions, six FTE and $121,000 in the Corps clerical staff will be offset by a net increase of six permanent positions, six FTE and $121,000 in pre-examination processing. The decreased Corps clerical staff will provide sufficient personnel to keep pace with projected examiner productivity in 1987. The augmented clerical staff in pre-examination processing is necessary to insure the unimpeded flow of applications from the mail room to the Examining Corps. This processing includes verification of proper documentation, oath and fees, national security screening and preliminary classification by art. Pre-examination processing is a critical step that greatly influences the inventories of cases available for work throughout the rest of the process.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Contract Representative	6	+2	+$32,080
Clerk/typist	5	-2	-28,780
Clerk/typist	4	-3	-38,586
Total salaries		-3	-35,286
Less: lapse		+3	+41,286
Total permanent compensation		...	+6,000
Other personnel compensation		+1	+17,000
Total Compensation		+1	+23,000
Personnel benefits			+ 1,000
Communications, utilities, and other rentals			-1,000
Printing and reproduction			+1,000
Other services			-30,000
Supplies and materials			+6,000
Total			$ ...

Changes for FY 1987
(Dollar Amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Appeals and Interferences............	83 (79)	$4,548	86 (81)	$4,615	+3 (+2)	+$67

An increase of three permanent positions, two FTE and $67,000 is requested for the Board of Patent Appeals and Interferences to address growth in workload as Plan "18/87" is implemented. Backlogs increased by 845 cases in FY 1984 and 1,073 cases in FY 1985. This is a trend which will continue for the forseeable future unless the proposed additional staffing and management initiatives are implemented. The requested FTE are for three legal technicians to process appeals decisions which will be prepared by qualified examining professionals in the Examining Corps. By assigning appeals to qualified examining staff, permanent growth in the size of the Board can be temporarily avoided. The limited assignment of such work to other professionals will also develop a pool of experienced examiners from which to draw future Board members. The current pendency of appeals cases is nearing three years. Timely disposal of appeals has a direct impact on the quality of examinations because these decisions represent an important source of feedback to the examining corps.

The position and object class detail follows:

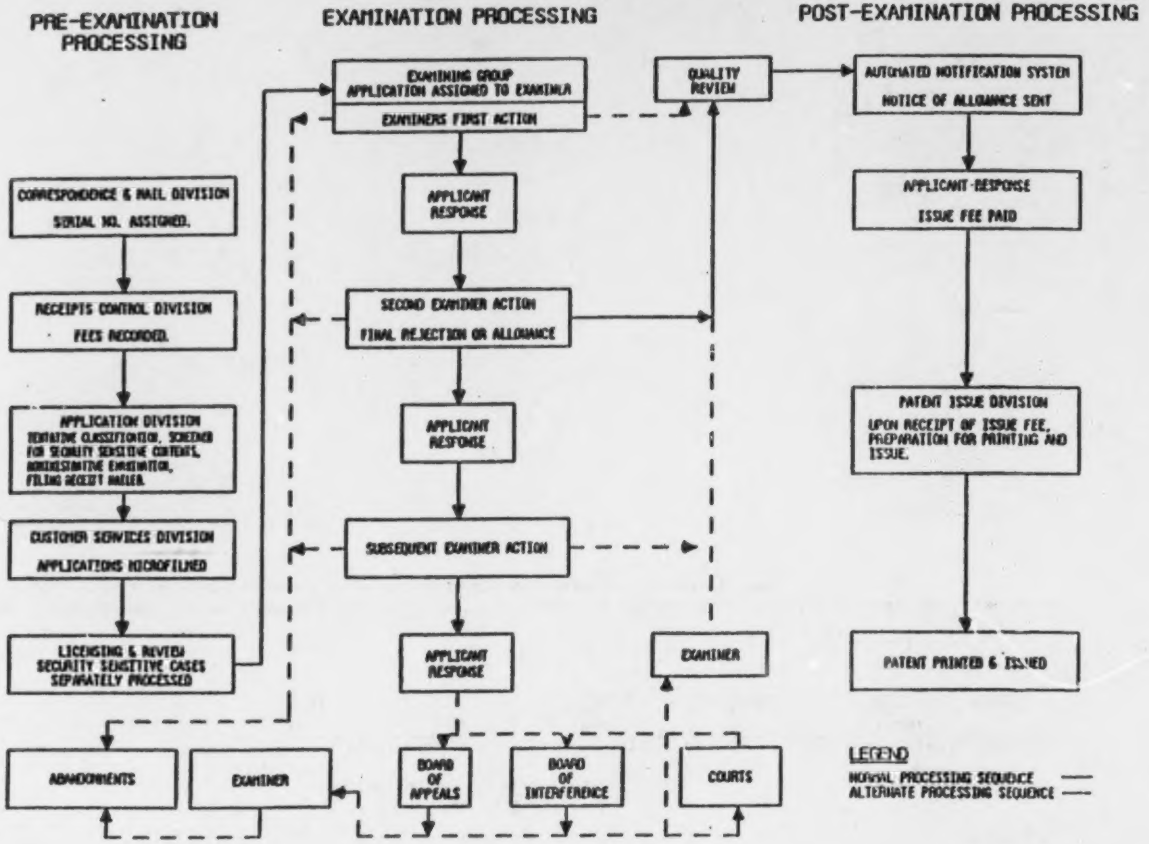
	GS-Grade	Number	Annual Salary
Legal Technician....................................	7	+3	+$53,472
Total Salaries..............................		+3	+53,472
Less: lapse..		-1	-15,472
Total Compensation..........................		+2	+38,000
Personnel benefits.................................			+6,000
Communications, utilities, and other rentals.......			+3,000
Printing and reproduction..........................			+1,000
Other services.....................................			+11,000
Supplies and materials.............................			+8,000
Total.....................................			+$67,000

Changes for FY 1987
(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Patent Printing......................	...	$17,581	...	$17,932	...	$ +351
	(...)		(...)		(...)	

The PTO requests a net increase of $351,000 (object class 24.0) to print the increased output of the Examining Corps from 128,000 to 130,000 disposals related to growth in production from the Plan "18/87" initiative.

THE PATENT PROCESS


PRE-EXAMINATION PROCESSING
EXAMINATION PROCESSING
POST-EXAMINATION PROCESSING
CORRESPONDENCE & MAIL DIVISION
SERIAL NO. ASSIGNED.
RECEIPTS CONTROL DIVISION
FEES RECORDED.
APPLICATION DIVISION
TENTATIVE CLASSIFICATION, SCREENED FOR SECURITY SENSITIVE CONTENTS, ADMINISTRATIVE EXAMINATION, FILING RECEIPT MAILED.
CUSTOMER SERVICES DIVISION
APPLICATIONS MICROFILMED
LICENSING & REVIEW
SECURITY SENSITIVE CASES SEPARATELY PROCESSED
EXAMINING GROUP
APPLICATION ASSIGNED TO EXAMINER
EXAMINERS FIRST ACTION
APPLICANT RESPONSE
SECOND EXAMINER ACTION
FINAL REJECTION OR ALLOWANCE
APPLICANT RESPONSE
SUBSEQUENT EXAMINER ACTION
APPLICANT RESPONSE
QUALITY REVIEW
EXAMINER
AUTOMATED NOTIFICATION SYSTEM
NOTICE OF ALLOWANCE SENT
APPLICANT RESPONSE
ISSUE FEE PAID
PATENT ISSUE DIVISION
UPON RECEIPT OF ISSUE FEE, PREPARATION FOR PRINTING AND ISSUE.
PATENT PRINTED & ISSUED
ABANDONMENTS
EXAMINER
BOARD OF APPEALS
BOARD OF INTERFERENCE
COURTS
LEGEND
NORMAL PROCESSING SEQUENCE ——
ALTERNATE PROCESSING SEQUENCE – –

PTO-28

Justification of Program and Performance

(Dollar amounts in thousands)

Activity: Trademark Process

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec. (-) From 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Examination of Trademarks......	230	$11,400	232	$10,869	232	$11,262	232	$12,459	...	+$1,197
	(231)	(10,612)	(225)	(12,515)	(225)		(225)		(...)	
Trial and Appeal Board.........	30	1,316	30	1,317	30	1,338	34	1,458	+4	+120
	(32)	(1,316)	(30)	(1,514)	(30)		(33)		(+3)	
Trademark Printing............	...	1,421	...	690	...	690	...	690	...	...
		(1,095)		(499)						
Subtotal..................	260	14,137	262	12,876	262	13,290	266	14,607	+4	+1,317
	(263)	(13,023)	(255)	(14,528)	(255)		(258)		(+3)	
Offsetting fee Collections.....		-12,085		-12,876		-13,290		-14,607		-1,317
		(-10,971)		(-14,528)						
Additional fee collections applied to 1985		-2,052		...		...		...		...
		(-2,052)								
Net Request....................		...		...		...		...		...
		(...)		(...)						

Goals

To stimulate business investments and protect consumers by providing prompt registration of trademarks, and to provide the public with information concerning pending and registered marks.

To automate the Patent and Trademark processes by 1990.

Objectives

To maintain the achievements of 1985 and 1986:

- the reduced trademark pendency of three months to first action and thirteen months to disposal.
- the reduced Trademark Trial and Appeal Board adjudication period of twelve weeks.
- the automated operation of Trademark Process functions including searching and photocomposition.

Base Program

Examination of Trademarks: Trademark examination involves: (1) determining the acceptability of applications for the registration of marks through a search of prior registrations, and consideration of statutory requirements, case law, rules of practice and trademark procedures and practice; (2) approving marks to be published for opposition; and (3) review of affidavits of use and renewals, and cancellation of or allowing expiration of marks not complying with statutory requirements. Related duties, such as accepting affidavits of incontestability, furnishing certified copies and verifying status of active registrations are also performed. These duties require the maintenance of a system for the classification of goods and services, and the maintenance of a search file of registered marks and pending and unpublished applications. (See PTO-36 for a flow chart of the Trademark examination process.)

This sub-activity also includes funding for Trademark Automation. Trademark Automation is designed to improve search effectiveness, ensure file integrity, provide a full text data base of registrations for internal use, and provide automated photocomposition of the Official Gazette and related registration documents.

Trial and Appeal Board

The Trademark Trial and Appeal Board (TTAB) decides adversary proceedings involving interference applications, oppositions to registration, concurrent use applications, and cancellation petitions. The TTAB also hears ex parte appeals from examining attorneys' refusals of registration.

Trademark Printing

After an examining attorney allows a case for publication, the mark is printed in the Official Gazette. If the mark is opposed within 30 days, the case goes to the TTAB. If it is not opposed, the mark is registered, a certificate of registration is printed and mailed to the applicant, copies are made for sale to the public, a notice of registration is printed in the Official Gazette, and a record of the registration is kept in the Patent and Trademark Office.

Summary of Workload and Performance Data

Trademark Applications:	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Applications in Office (start of year)	118,878	106,585	76,362	76,362
Applications received 1/	61,480	64,677	66,800	68,800
Application disposals by examiners	-82,130	-86,318	-66,800	-68,800
Change in printing inventory	8,357	-8,582	...	...
Applications in Office (end of year)	106,585	76,362	76,362	76,362
First actions	72,953	74,422	65,600	67,600
Certificates of registration printed	45,475	63,122	44,200	45,600
Pendency to first action (in months)	5.3	2.6	3.0	3.0
Pendency to registration/abandonment (in months)	19.1	13.8	13.0	13.0
Contested cases before the Trial and Appeal Board:				
Received during the year	3,233	4,169	3,300	3,200
Disposed of during the year	2,474	2,790	2,600	2,950
Pending (end of year)	4,337	5,716	6,416	6,666

1/ Applications covering two or more classes of goods or services are counted as two or more applications.

Changes for Fiscal Year 1987

The changes shown in this request reflect the sixth year of a multi-year integrated plan to revitalize the Patent and Trademark Office by reducing pendency and automating the PTO. The thrust of this plan as it applies to the Trademark Process is: to improve the quality of examination through increased funds for making corrections to the Trademark data base, and increased funds to ensure an accurate *Official Gazette*; increased funds for improvements to the Trademark Automation program; and to improve the quality and timeliness of production in the TTAB through enhancements for the professional and non-professional staff.

(dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount
Examination of Trademarks	232 (225)	$11,262	232 (225)	$12,459	... (...)	+$1,197

Examination of Trademarks

The PTO requests an increase of $1,197,000 for Examination of Trademarks. The requested change consists of two parts:

	Perm Pos.	FTE	Amount
Text Editing and Proofreading	...	...	+$ 296
Trademark Process Automation	...	...	+901
Total	...	...	+$1,197

Text Editing and Proofreading +296,000

In order to fully benefit from the Automated Trademark Application Monitoring System (TRAM2) an increase of $296,000 is necessary for text editing ($46,000) and proofreading ($250,000). It is vital to provide the necessary text editing in order to ensure file integrity and to keep the Trademark data base properly updated and corrected. An increase of $46,000 ensures that base funding is sufficient in FY 1987 to contract for the text editing function. Without this increase, there would be insufficient funds to handle the increased demands for text editing and updating the TRAM2 data base; and trademark quality would be weakened.

Closely related to text editing and even more crucial is the proofreading function which ensures that the PTO produces a high quality Official Gazette accurately depicting the status and results of Trademark examination. An increase of $250,000 provides sufficient funds to contract for the proofreading function which is performed prior to printing the Official Gazette. Without this increase, the quality of the printed Official Gazette would deteriorate, public complaints would increase, and the U.S. Trademark Registration system would deteriorate rapidly.

Trademark Process Automation +$901,000

The PTO requests a net increase of $901,000 to fund an automation initiative providing further improvements in the capabilities, performance, availability, and efficiency of the existing systems through enhancements for an integrated ATS (Automated Trademark System). The purpose of the ATS is to integrate into one system the current TRAM2 and T-SEARCH systems, thereby minimizing overlap and duplicated storage and processing of the data bases. The full cost of the increase has been partially offset by a decrease of $624,000 for the T-SEARCH contract. ATS will provide automated support to all Trademark operations currently supported by TRAM and T-SEARCH. Since ATS will benefit the Trademark Process, resources are requested in this activity to reflect more accurately the requirements of Trademark processing. This increase is part of the PTO's revised Automation Master Plan. The original Automation Master Plan was developed in compliance with Section 9 of P.L. 96-517. This system is explained in more detail in the Automation Summary section of Executive Direction and Administration, and the Revised Automation Master Plan.

The PTO established the following guidelines for modification of the Automation Master Plan for Trademark Automation:

- Priority is given to enhancements that will increase the utility of TRAM and T-SEARCH, including:
  - Correcting known errors in the text and image data bases,
  - Establishing a program to bring the data to current quality standards,
  - Improving text editing capabilities to better support photocomposition, and
  - Optimally tuning the T-SEARCH system for improved performance.

- Actions will be taken to remove restrictions on the public use of data bases obtained by exchange agreements.
- The data base will be augmented to include facsimile images of original registrations so that exact copies can be printed as reference citations.
- T-SEARCH will be modified to allow the text and design elements of the data base to be displayed at the same time.
- TRAM and T-SEARCH data bases will be integrated in the Automated Trademark System (ATS) so as to minimize overlap and duplicated storage and processing.
- The level of availability of computer systems will be increased via the ATS to ensure that trademark operations are not hampered or delayed by system outages and recovery operations.

Using these revised guidelines, current and outyear funding projections for Trademark Process Automation are (dollar amounts in thousands):

	1986		1987		1988		1989		1990		1991	
	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount	FTE	Amount
Base	...	$ 305	...	$1,184	...	$2,085	...	$1,633	...	$1,692	...	$1,751
Projected Adjustments to Base	...	...	...	...	...	+63	...	+59	...	+59	...	+55
Changes	...	+879	...	+901	...	-515	...	...	...	...	...	...
Total	...	1,184	...	2,085	...	1,633	...	1,692	...	1,751	...	1,806

The revised Automation Master Plan, which supports the net program increase of $901,000 for Trademark Process Automation, will be transmitted to the Congress under separate cover.

The object class detail follows:

	Amount
Communications, utilities and other rent....................	+$1,575,000
Other Services..	-378,000
Total...	+$1,197,000

Changes for FY 1987
(dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm Pos.	Amount	Perm Pos.	Amount	Perm Pos.	Amount
Trial and Appeal Board................	30	$1,338	34	$1,458	+4	+$120
	(30)		(33)		(+3)	

The PTO requests an increase of 4 permanent positions, 3 FTE and $120,000 for the Trademark Trial and Appeal Board. The requested change consists of two parts:

	Perm. Pos.	FTE	Amount
Professional Staff	+1	+1	+$ 44
Clerical Staff	+3	+2	+76
Total	+4	+3	+$120

Professional Staff +1 permanent position, +1 FTE and +$44,000

The TTAB workload is directly related to Trademark examiner disposals. Increases in examiner output have resulted in corresponding increases in the Board's docket of pending cases. At the end of FY 1980 there were 2,298 pending cases at the TTAB. By the end of FY 1985, there were 5,716 pending cases. The rapid increases in the number of cases in the pending docket are very significant even though only about 10 percent of the new cases filed are litigated to a final decision on the merits. During the life of each case, numerous papers are filed with the Board, many of which require action by the Board's professional staff. Thus each case in the pending docket increases the workload of the Board's attorneys, whether or not the case goes all the way to a final decision on the merits. This is particularly true in inter partes cases, which make up 86 percent of the Board's docket. The principal immediate impact of an increase in new filings is upon the workload of the interlocutory attorney-examiners who are responsible for acting on interlocutory motions. There is also an immediate impact upon the workload of the Board members, who must supervise the work of the interlocutory attorney-examiners on motions in inter partes cases, and who themselves handle the interlocutory type actions in ex parte appeal cases. However, the most significant workload impact for Board members occurs later, when cases which were filed at the time of the start of the increase in new cases become ready for final decision. An increase of one position, one FTE and $44,000 enables the TTAB to hire an Acting Board Member who not only can act on interlocutory motions, but can also serve on hearing panels the same as full Board Members. Without this increase, the pending docket growth could not be decelerated and the pendency time at the TTAB would increase to an even higher level.

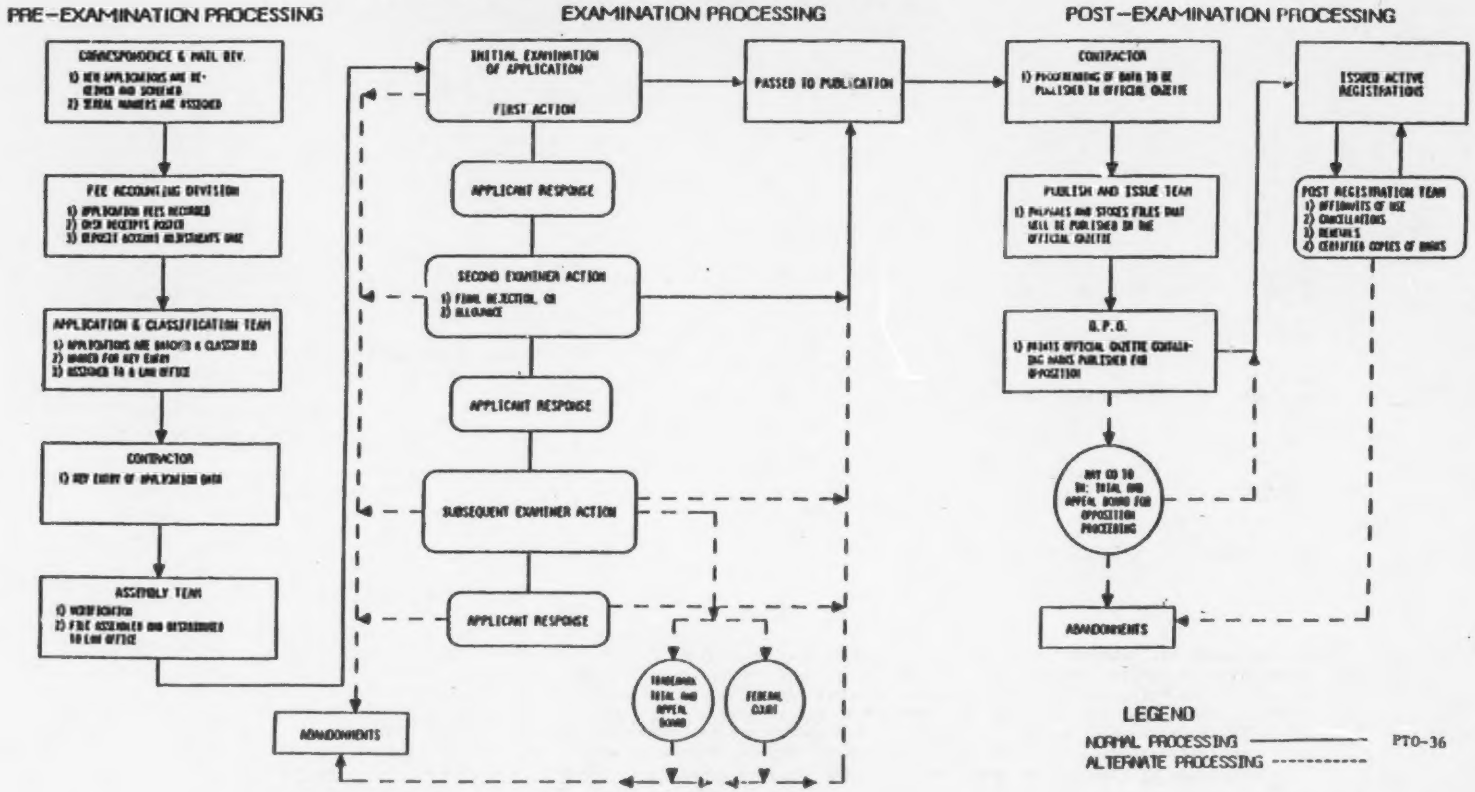
Clerical Support +3 permanent positions, +2 FTE and $76,000

The rapid increases in the number of cases in the TTAB's pending docket are extremely significant in terms of clerical staffing levels. During the life of each case, whether ex parte or inter partes, numerous papers are filed with TTAB. In turn the TTAB must prepare and issue letters or actions in response. Increased demands are also caused by the deployment of TRAM2 to the TTAB. As a result of the large number of cases in the TTAB's docket and consequent paper flow with each case, the addition of the "TRAM" function has placed new requirements on the TTAB's clerical staff. An increase of three positions, two FTE and $76,000 enables the TTAB to keep current with incoming cases. This includes $25,000 for overtime to reduce the clerical backlog. Without this increase, the TTAB clerical processing will experience continued growing delays.

The position and object class detail follows:

Position Title	GS-Grade	Number	Annual Salary
Acting Board Member	15	+1	+$52,262
Deputy Administrator, Clerical Branch	8	+1	+19,740
Legal/Applications Clerk	5	+2	+28,780
Total salaries		+4	+100,782
Less lapse		-1	-39,782
Total Permanent Compensation		+3	+61,000
Other Personnel Compensation		+1	+25,000
Total Compensation		+4	+86,000
Personnel Benefits			+11,000
Communications, Utilities and Other Rent			+4,000
Printing and Reproduction			+1,000
Other Services			+14,000
Supplies and materials			+4,000
Total			+$120,000

THE TRADEMARK PROCESS


PRE-EXAMINATION PROCESSING
EXAMINATION PROCESSING
POST-EXAMINATION PROCESSING
CORRESPONDENCE & MAIL REV.
1) NEW APPLICATIONS ARE RECEIVED AND SCREENED
2) SERIAL NUMBERS ARE ASSIGNED
FEE ACCOUNTING DIVISION
1) APPLICATION FEES RECORDED
2) CASH RECEIPTS POSTED
3) DEPOSIT ACCOUNT ADJUSTMENTS MADE
APPLICATION & CLASSIFICATION TEAM
1) APPLICATIONS ARE GROUPED & CLASSIFIED
2) MARKED FOR KEY ENTRY
3) ASSIGNED TO A LAW OFFICE
CONTRACTOR
1) KEY ENTRY OF APPLICATION DATA
ASSEMBLY TEAM
1) VERIFICATION
2) FILE ASSEMBLED AND DISTRIBUTED TO LAW OFFICE
INITIAL EXAMINATION OF APPLICATION
FIRST ACTION
APPLICANT RESPONSE
SECOND EXAMINER ACTION
1) FINAL REJECTION, OR
2) ALLOWANCE
APPLICANT RESPONSE
SUBSEQUENT EXAMINER ACTION
APPLICANT RESPONSE
ABANDONMENTS
TRADEMARK TRIAL AND APPEAL BOARD
FEDERAL COURT
PASSED TO PUBLICATION
CONTRACTOR
1) PROOFREADING OF DATA TO BE PUBLISHED IN OFFICIAL GAZETTE
PUBLISH AND ISSUE TEAM
1) PREPARES AND STORES FILES THAT WILL BE PUBLISHED IN THE OFFICIAL GAZETTE
G.P.O.
1) PRINTS OFFICIAL GAZETTE CONTAINING MARKS PUBLISHED FOR OPPOSITION
MAY GO TO TM: TRIAL AND APPEAL BOARD FOR OPPOSITION PROCEEDING
ABANDONMENTS
ISSUED ACTIVE REGISTRATIONS
POST REGISTRATION TEAM
1) AFFIDAVITS OF USE
2) CANCELLATIONS
3) RENEWALS
4) CERTIFIED COPIES OF MARKS
LEGEND
NORMAL PROCESSING
ALTERNATE PROCESSING
PTO-36

Justification of Program and Performance

Activity: Information Dissemination

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-) From 1987 Revised Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Customer services...........	115 (127)	$10,087 (10,241)	121 (125)	$11,608 (11,851)	121 (129)	$11,853	126 (133)	$12,384	+5 (+4)	+$531
Publication services........	101 (79)	3,157 (3,308)	119 (112)	3,767 (3,863)	119 (115)	3,983	119 (115)	3,983	...	...
Data and document retrieval systems................	281 (262)	21,591 (20,207)	281 (289)	26,658 (27,479)	281 (289)	27,207	281 (289)	25,802	...	-1,405
Subtotal...............	497 (468)	34,835 (33,756)	521 (526)	42,033 (43,193)	521 (533)	43,043	526 (537)	42,169	+5 (+4)	-874
Offsetting fee collections..		-18,701 (-17,725)		-25,393 (-25,999)		-24,423		-24,130		+293
Financing from deferral of prior year funds..........		...		-2,125 (-2,125)		...				
Net request................		16,134 (16,031)		14,515 (15,069)		18,620		18,039		-581

Goals

- Reduce patent pendency to 18 months by the end of 1987 and improve patent quality.
- Automate the Patent and Trademark processes by 1990.

- Disseminate information relating to new technology and trademarks through the publication of patents and trademarks.
- Stimulate innovation through prompt dissemination of patented technology.
- Organize technological and trademark information in a manner which will be readily accessible to both examiners and the public.

Objectives

- Properly maintain search room facilities, instruct the public in their use, and fill requests for copies of official documents.
- Efficiently perform pre- and post-examination support functions.
- Process allowed patent applications and process trademarks when they become ready for publication or registration.
- Maintain a current and accessible subject matter classification system for use in locating prior art and new technology; ensure the integrity of related search files and data records; and facilitate retrieval through automated patent search systems.

Base Program

The Customer Services activity includes reproduction services, assignment functions, and file integrity maintenance of the patent and trademark search rooms. This includes the sale and production of certified and uncertified copies of records and printed copies of patents and trademark registrations. Legal instruments that affect or transfer property rights in patent and trademark cases are received, examined, and recorded. All newly filed patent and trademark applications are microfilmed. PTO maintains a patent search room and a trademark search room containing over 13.4 million U.S. patents and over 3.3 million trademark files for both employee and public use.

Publication Services manage, monitor, and execute the various stages through which allowed applications progress before they are issued as patent grants or trademark registrations. Program activities include preparing, scheduling, and transmitting allowed applications for printing; developing and administering quality standards; certifying and distributing patent grants; and disclosing information to the public, principally through the two weekly editions of the Official Gazette (one patent edition and one trademark edition).

Data and Document Retrieval Systems maintain and update a subject matter classification system for U.S. and foreign patents and related technical literature that is vital to the patent application examination process. The search files, containing more than 13.9 million U.S. patents, 12 million foreign patent documents, and about 1.2 million technical literature documents, are continually expanding. Over 250,000 U.S. patents and cross-references and over 300,000 distinct foreign patents are added annually. A concentrated effort is being made to reclassify the files by expanding the classifications for new technologies and subdividing the ever-expanding search files of patents and technical literature into technologically up-to-date and smaller, more efficiently searched classification groups. Other resources are for foreign patent processing, maintenance of a Scientific Library, and the Patent Depository Library System.

Summary of Workload and Performance Data

Workload and performance indicators are as follows (in thousands):

Customer Services	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Document prints furnished	19,908	21,141*	22,500*	32,000*
Certified copies	93	89	95	95
Patent and trademark copy orders	2,263	2,360	3,200*	3,200*
Pages of documents microfilmed	5,553	6,991 1/	18,361*	18,697
Patent files microfilmed	...	6 1/	109*	109*
Trademark files microfilmed	...	... 2/	166*	166*
New patents filed	259	278	265*	265*
Reclassified patents filed	464	421	350*	350*
Assignment documents recorded	87	105	80	80
Assignment title reports	24	31	20	20
Data and Document Retrieval Systems				
Original references professionally reclassified	107	90	88	95
Original references clerically processed	100	91*	88*	107*
New foreign patents processed into the files	255	315	315	315
Patent Depository Libraries established	53	60	65	65

*To be partially or completely accomplished by contractor personnel.

1/ Microfilming of file wrappers curtailed in March 1985 as a result of funding realignment, therefore total lower then estimated in the 1986 Congressional request.

2/ No trademark files microfilmed due to funding realignment in 1985.

Changes for Fiscal Year 1987

	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm. Pos.	Perm. Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Customer services........................	121 (129)	$11,853	126 (133)	$12,384	+5 (+4)	+$531

The PTO requests an increase of five positions, four FTE, and $531,000 to meet Patent and Trademark examination and user requirements for services as follows:

(dollars in thousands)

	Perm Pos.	FTE	Amount
Microfilming patent applications............	...	...	+$ 42
Copy fulfillment system overhaul............	...	...	+167
Maintaining (paper) Trademark Search Room....	+5	+4	+322
Total................................	+5	+4	+$531

Microfilming Patent Applications

The PTO requests an increase of $42,000 to microfilm the increased volume of patent applications. The request will provide 1,844 overtime hours for microfilming applications and 350 hours for quality control of the pages filmed.

Due to increased filings of patent applications and additional effort required to reduce pendency, the microfilming workload has backlogged. Microfilming applications is the last processing step before the applications are forwarded to the examining groups.

The requested increase will enable the PTO to eliminate the backlog and assist in reducing patent pendency. Failure to provide a stable and permanent funding base for microfilming the increased numbers of patent application filings could delay the microfilming processes and add 5.4 weeks to pre-examination pendency time.

Copy Fulfillment System Overhaul

The PTO requests an increase of $167,000 to re-manufacture equipment used in patent and trademark copy reproduction. Three custom-made reproduction machines installed in 1978 currently provide most of the copies of patents and trademarks to examiners and the public (3,200,000 orders annually). The three machines are expected to reproduce 14,400,000 pages based on anticipated 1987 volumes. The equipment is in very poor condition and parts are unavailable.

The reproduction equipment must remain operational until replaced by an automated system. This request provides that one of the machines be completely overhauled for mechanical parts and new motors to ensure partial maintenance of the current copy fulfillment system until replacement by an automated system.

Copies produced by the machines are used within the PTO for examiner search files; for reference, maintaining file integrity, and reclassifying files by the Office of Documentation; and for copies distributed and/or used by the Offices of Publication, Legislative and International Affairs, and Automation. Over 85% of the copies produced by the machines are sold to the public. These copy sales not only fulfill the PTO mandate to disseminate patent and trademark information to the public but also bring in a substantial level of fee income. In 1987, for example, copy sales are expected to produce $3,334,352 in fee income.

Maintaining the Paper Trademark Search Room

The PTO requests an increase of five permanent positions, four FTE and $322,000 to maintain the paper Trademark Search Room through 1987.

The 1986 budget proposed the establishment of an automated Trademark Public Search Room in 1986 concurrent with the abandonment of the paper search room. Recent actions by the Congress, user concerns on the source of income to operate the automated search systems, and a PTO proposal to upgrade the present T-SEARCH system, have postponed the establishment of the Automated Trademark Public Search Room. The PTO must therefore presume that the paper search room will be operational at least through 1987 as either a stand-alone system or as a parallel with the automated system. In either case, the PTO must have the funding necessary to run the paper system through 1987.

The requested funds will provide:

- Five file clerks to annotate trademark search files; to assist the public in using the paper files; and to monitor the file maintenance (A-76) contract.
- Continuation of the file maintenance contract to maintain the utility of the paper files.

The position and object class detail for the change follows:

Position Title	GS Grade	Number	Annual Salary
File Clerks..	5	+3	+$ 43,170
File Clerks..	4	+2	+25,724
Total Salaries................................		+5	+68,894
Less: Lapse..................................		-1	-6,894
Total Permanent Compensation..................		+4	+62,000
Other personnel compensation.......................		+1	+31,000
Total Personnel Compensation..................		+5	+93,000
Personnel benefits.................................			+8,000
Communications, utilities and other rentals........			+15,000
Printing and reproduction..........................			+1,000
Other services.....................................			+400,000
Supplies and materials.............................			+14,000
Total.......................................			+$531,000

Changes for Fiscal Year 1987
(Dollar amounts in thousands)

	1987 Base		1987 Estimate		Inc. (+) or Dec (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Data and Document Retrieval Systems...	281 (289)	$27,207	281 (289)	$25,802	...	-$1,405

Information Dissemination Automation

The PTO requests a reduction of $1,405,000 from the base of $10,000,000 for Information Dissemination Automation. This reduction reflects the decreased share of the costs of the Automated Patent System (APS) and the Data Input/Output System (DIOS) attributable to Information Dissemination. Since the systems listed below will benefit Information Dissemination, resources for these initiatives are requested in this activity to reflect more accurately the true requirements of Information Dissemination. This change is consistent with the PTO's revised Automation Master Plan. The original Automation Master Plan was developed in compliance with Section 9 of P.L. 96-517.

The 1987 estimate is composed of the following systems which are explained in detail in the Automation Summary section of Executive Direction and Administration, and the Revised Automation Master Plan (dollar amounts in thousands):

Information Dissemination Automation	1987 Base	Change	1987 Estimate
Patent Automation (APS)	$ 7,500	-$ 832	$6,668
Data Base Automation (DIOS)	2,500	-573	1,927
Total Information Dissemination Automation	10,000	-1,405	8,595

The PTO established the following guidelines for modification of the Automation Master Plan:

- First priority will be given to implementing system functions and features that contribute to improvement of patent quality, including:
  - establishing and maintaining full integrity electronic data bases, and
  - deploying electronic search and retrieval capabilities to the Patent Examining Corps.
- Second priority will be given to installation of cost effective and/or productivity improvement system capabilities including:
  - reducing or eliminating paper search file maintenance,
  - using Optical Character Reader (OCR) techniques to convert newly allowed patents to electronic form with maximum automated composition for display and photocomposition,
  - converting the Classification and Search Support Information System (CASSIS) and Classification Data System (CDS) to operate with APS data bases and computers, and
  - replacing current patent copy sales techniques.
- Desirable but more costly or difficult to install system features, such as application maintenance, will be deferred until the higher priority capabilities have been deployed and the expansion features have been more thoroughly evaluated in the testbed environment.

Using these revised guidlines, current outyear funding projections for Information Dissemination Automation are (dollar amounts in thousands):

	1986	1987	1988	1989	1990	1991
Base	$ 4,025	$10,000	$ 8,595	$14,155	$13,507	$15,300
Projected Adjustments to Base	...	...	+308	+70	+107	+119
Changes	+5,975	-1,405	+5,252	-718	+1,686	-1,073
Total	10,000	8,595	14,155	13,507	15,300	14,346

The revised Automation Master Plan, which supports this budget reduction of $1,405,000 in FY 1987 for Information Dissemination Automation, will be transmitted to Congress under separate cover.

The position and object class detail for the change follows:

Object Class	Amount
Other services....................................	-$1,932,000
Equipment...	+ 527,000
Total.....................................	-$1,405,000

Activity: Executive Direction
and Administration

Justification of Program and Performance
(Dollar amounts in thousands)

	1985 Actual		1966 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-) From 1987 Base	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Commissioner....................	9	$ 496	9	$ 531	9	$ 549	9	$ 549	...	...
	(11)	(517)	(9)	(492)	(9)		(9)			
Solicitor.......................	25	1,524	25	1,591	25	1,649	25	1,649	...	...
	(25)	(1,445)	(24)	(1,591)	(24)		(24)			
Legislation & Int'l Affairs.....	24	1,109	24	1,128	24	1,173	24	1,173	...	...
	(22)	(1,342)	(23)	(1,179)	(23)		(23)			
Management Planning.............	49	2,314	47	2,309	47	2,404	47	2,404	...	...
	(45)	(2,395)	(48)	(2,374)	(48)		(48)			
Administrative Services.........	180	6,607	182	6,272	182	6,532	191	6,742	+9	+$210
	(193)	(7,178)	(215)	(6,744)	(214)		(223)		(+9)	
Automation......................	151	16,322	194	14,583	194	15,273	226	20,757	+32	+5,484
	(156)	(15,456)	(186)	(17,128)	(195)		(219)		(+24)	
Quality Review..................	14	932	16	1,037	16	1,104	16	1,104	...	...
	(15)	(878)	(15)	(1,061)	(16)		(16)			
Subtotal......................	452	29,304	497	27,451	497	28,684	538	34,378	+41	+5,694
	(467)	(29,211)	(520)	(30,569)	(529)		(562)		(+33)	
Offsetting fee Collections......		-9,765		-11,429		-11,985		-15,487		-3,502
		(-9,074)		(-12,209)						
Financing from deferral of prior year funds....................		...		-1,520		...		...		...
				(-1,520)						
Financing from unobligated balance of prior year funds...		...		...		...		-8		-8
		19,539		14,502		16,699		18,883		2,184
		(20,137)		(16,840)						

Goals

- Reduce patent pendency to 18 months by the end of 1987 and improve patent quality.
- Stimulate productivity and economic development.
- Provide executive direction for the administration of the Patent and Trademark Office (PTO).
- Administer legal, international, legislative, management and automation activities.
- Maximize the effectiveness of patent and trademark systems in the United States.
- Promote effective and efficient protection of industrial property rights of U.S. nationals throughout the world.
- Automate the Patent and Trademark processes by 1990.

Objectives

- Improve management planning and control processes through automation, systems analysis methodology and the centralization of financial management and budgetary responsibility.
- Improve the protection of industrial property rights in the U.S. and abroad by developing domestic legislation and international agreements.
- Provide support services to all PTO operations promptly, efficiently and competently.
- Perform quality reviews of examined patent applications.
- Provide centralized guidance, coordination and implementation of PTO internal improvements.
- Administer and manage automation initiatives to aid in developing new search, retrieval and display systems.

Base Program

Commissioner

The Office of the Commissioner, in cooperation with the Department of Commerce and OMB, determines domestic patent and trademark policies, and, in cooperation with the Departments of Commerce and State, develops international intellectual property policies and participates in interagency groups to develop intellectual property policy recommendations. The Commissioner directs the examination and issuance of patents as well as the examination and registration of trademarks, and directs the dissemination of information contained in patent and trademark documents. The Commissioner renders quasijudicial rulings on patent and trademark issues arising in PTO and serves as a liaison between the Administration and Congress, intellectual property bar associations, industry and the public.

Solicitor

The Solicitor handles all litigation to which the Commissioner is a party; investigates legal matters for the Commissioner; prepares opinions and decisions on legal questions; provides advice and assistance on legislative matters, application of administrative laws and regulations; examines and registers attorneys and agents to practice before the Patent and Trademark Office; investigates complaints of misconduct and brings disbarment proceedings against registered attorneys and agents; maintains the law library; and provides assistance and advice on Federal employee invention policy matters.

Legislation and International Affairs

The Office of the Assistant Commissioner for External Affairs supervises the Office of Legislation and International Affairs and the Office of Public Affairs.

The Office of Legislation and International Affairs drafts legislative and policy proposals concerning intellectual property matters, prepares supporting documentation to carry out the legislative program and the policies of the Commissioner and reviews and prepares analyses of other legislative proposals concerning intellectual property matters. This Office prepares Congressional testimony for the Commissioner and other PTO and Department officials and maintains a liaison with Congress, the intellectual property bar associations, industry, and others concerned with proposed and pending legislation.

This Office promotes international development and use of intellectual property systems to provide improvements and more cost effective means of protecting intellectual property rights of U.S. nationals throughout the world. This includes developing and maintaining multilateral systems for protection of intellectual property rights; assisting in the establishment of bilateral agreements with other intellectual property offices; promoting the establishment of adequate systems in developing countries for the protection of intellectual property rights; and developing international standards and procedures to encourage foreign filing by U.S. nationals and to facilitate access to the information contained in patent documents.

The Office of Public Affairs arranges media meetings for the Commissioner and other senior PTO officials, prepares press releases on PTO activities, and, through printed materials, informs the public of the patent and trademark systems and the operation of the PTO.

Management Planning

Management planning offices implement budget, fiscal, and automation policy. Offices included in the management planning function develop and monitor the long and short-term objectives of the PTO, operate a management information system providing current and accurate information on PTO program production, and maintain PTO budgetary and financial systems.

Administrative Services

Support services for PTO are: assistance on administrative matters; personnel recruitment, position classification and pay administration, employee development, personnel/payroll processing and records administration, and employee/labor relations programs; administration of equal employment opportunity programs; mail and messenger services; printing services and maintenance of official records; procurement support and contract management; supply, property, and photocopier management; telecommunication and space management; travel and shuttle services; and maintenance of patented, abandoned and registered files. Other services include: evaluation of proposals on management improvements and organizational changes, and coordination of government-wide, management improvement programs.

Automation

This function is responsible for implementation of the Office-wide Automation Master Plan. This line item provides funds for Patent Automation and Data Base Automation and directs, plans and provides automation support for the PTO. Support is provided for existing ADP systems as well as for the patent and trademark automation programs. Support includes: systems analysis and design; acquisition or development of computer systems, software and automated information systems; installation and test of systems; operation and maintenance of information systems; and operation of general purpose ADP and communication equipment.

Quality Review

The Quality Review Program evaluates and monitors patent product quality in the examining process by conducting reviews on a four percent sample of all regular patent applications allowed by the Patent Examining Corps. The Quality Review program also provides feedback to management for evaluation and corrective purposes and makes recommendations for procedural change.

Summary of Workload and Performance Data

Commissioner:
In 1984, the Commissioner was elected Chairman of the General Assembly of the World Intellectual Property Organization, a United Nations specialized agency that is a prime instrument for demonstrating the importance of intellectual property to developing as well as industrialized nations. The Commissioner testified before Congressional committees on general oversight, the budget, and other legislative proposals and continued to implement the plan to reduce patent and trademark application pendency times and to automate the PTO. He participated in domestic and international patent and trademark activities, including various meetings of patent and trademark law associations and headed the U.S. Delegation to the Fourth Session of the Diplomatic Conference for the Revision of the Paris Convention for the Protection of Industrial Property.

Solicitor:	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Cases disposed..............................	149	159	164	164
Freedom of Information Act requests..........	50	116	45	45
Attorneys tested/registered..................	862/389	772/445	835/400	835/400
Legal opinions rendered......................	336	335	450	450
Answers to inquiries from agencies...........	1,179	1,611	1,400	1,400
Disciplinary Proceedings.....................	2	1	3	3
Publication of Patent and Trademark suits....	2,402	2,119	2,814	2,814

Legislation and International Affairs:
The Office of Legislation and International Affairs prepared testimony on and urged Congressional action on a wide variety of legislative proposals effecting intellectual property rights including product-by-process patent protection, adherence to the Berne Convention, and patent term extension for agricultural and industrial chemicals. In addition, the Office provided technical assistance drafting intellectual property legislation endorsed by the President and prepared background materials and presented issues to the Economic Policy Council's Working Group on Intellectual Property.

The Office participated in international efforts to enhance the protection of intellectual property and the administration of intellectual property laws such as the consultative meetings on the revision of the Paris Convention, the Patent Cooperation Treaty, Committee of Experts on Harmonization of Patent Laws, and the Trilateral Conference on Automation. The Office also participated in bilateral negotiations on strengthening intellectual property with developing countries including Korea and Taiwan, and training and assistance programs in the U.S. and abroad for nationals of developing countries including China, Korea, Taiwan, Mexico, Indonesia, and Malaysia. Also, the Office worked with the Department of Commerce, Department of State, and the U.S. Trade Representative on trade-related intellectual property issues.

Management Planning:	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Accounting transactions processed....................	29,192	24,073	15,000	15,000
Deposit account transactions processed...............	305,110	235,725	330,000	330,000
Cash receipt transactions processed..................	519,834	555,045	570,000	570,000

Management planning ices also provided direction for the implementation of the Automation Master Plan. These offices continued cooperativ tomation exchange efforts with the European and Japanese Patent Offices, and carried out the fiscal and budgetary responsibilities of the Office.

Administrative Services:	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Employees trained/counseled..........................	1,804	2,158	1,930	1,930
Classification and employment actions................	3,805	3,037	3,950	3,950
Mail processed.......................................	1,398,516	3,756,073	3,303,865	3,934,990
File orders filled...................................	163,485	165,977	173,736	173,736

Automation:

Patent Automation: In 1985 Planning Research Corporation (PRC) identified requirements for the Automated Patent System (APS), specified the final system architecture, developed acquisition requirements, issued requests for proposals for component acquisitions, negotiated for and awarded component contracts, and began loading the post-1975 text data base. Major procurements for the APS included two mainframes. Mainframe I was installed in February at the System Development Laboratory (SDL) at PRC's Dulles International Airport facility. Mainframe II was installed in March in the Crystal Mall I computer site at the PTO.

Trademark Automation: The TRAM2 system was installed at the Trademark Trial and Appeal Board in October of 1984. The search system for examiner image searching was completed in December of 1984. The PTO initiated use of automated photocomposition to produce the Trademark Official Gazette (OG) in February of 1985. Mandatory data elements of the Trademark data base were certified accurate by September 1985.

Data Base Automation: PRC began loading the post-1975 patent text data base in July 1985. The local image capture system for the European Patent Office patent documents was acquired. The backfile image capture contract was awarded in November 1985.

ADP Support Systems: One Burroughs B6900 computer became operational in FY 1985 to handle the increased workload during the transition to APS.

Quality Review:	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Regular four percent sample..........................	2,850	3,251	3,500	3,500
Reissue: 15 percent sample...........................	37	40	40	40
Reissue screening: 100 percent sample................	301	310	310	310
Reexamination: 15 percent sample.....................	24	28	25	25

Changes for Fiscal Year 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Administrative Services.........	182 (214)	$6,532	191 (223)	$6,742	+9 (+9)	+$210

Mail Processing to Support Examination: +9 permanent positions, +9 FTE and +$210,000

The PTO requests an increase of nine permanent positions, nine FTE and $210,000 to address the increased pre-examination mail processing workload associated with increased filings and examiner actions.

The increased production levels of examiners hired over the past several years to achieve the patent and trademark pendency reduction goals have increased the number of actions initiated and processed. Higher filings have also increased workload requirements. The PTO projection of annual patent filings for 1987 has been increased from 107,000 to 116,000.

Prompt processing of mailroom documents and applications supports pendency reduction. The PTO will not be able to sustain the reduced trademark pendency time or reduce patent pendency time if this pre-examination function workload increase is ignored. To date, the mailroom pre-examination function has been maintained by stopgap measures providing additional resources from less critical program elements.

Mailroom requirements in 1987 will exceed the 1985 workload by at least nine percent. The PTO needs a permanent funding base increase to address these requirements.

The position and object class detail for the changes follow:

Position Title	GS Grade	Number	Annual Salary
Initial Review Clerks............................	4	+9	+$116,000
Less Lapse................................		...	...
Total Personnel Compensation..............		+9	+$116,000
Personnel benefits................................			+20,000
Standard level user charge........................			+26,000
Communications utilities, and other rent.........			+ 9,000
Printing and reproduction.........................			+26,000
Other services....................................			+ 7,000
Supplies and materials............................			+6,000
Total...			+$210,000

Changes for Fiscal Year 1987
(dollars in thousands)

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Perm. Amount
Automation......................	194 (195)	$15,273	226 (219)	$20,757	+32 (+24)	+$5,484

The PTO requests an increase of 32 positions, 24 FTE and $5,484,000 to fund automation initiatives identified in the revised Automation Master Plan. The original Automation Master Plan was prepared in accordance with Section 9 of P.L. 96-517. The increase in funds primarily reflects the increase in staff and the increased share of Patent Automation costs to be borne by Executive Direction Automation.

The 1987 estimate is composed of the following systems which are explained in detail in the Automation Summary section of Executive Direction and Administration, and the revised Automation Master Plan.

	1987 Base		Changes		1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Patent Automation (APS)	...	$ 2,500,000	...	$+5,355,000	...	$ 7,855,000
Data Base Automation (DIOS)	...	416,000	...	-57,000	...	359,000
ADP Support Systems	194	12,357,000	+32	+186,000	226	12,543,000
Total Executive Direction Automation	194	15,273,000	+32	+5,484,000	226	20,757,000

- The requested staff increase of 32 positions, 24 FTE and associated salaries is partially offset by decreases relating to lease, maintenance and supplies for equipment supporting current systems.
- The Office of Automated Data Processing (OADP) requests 18 positions for the following functions:

  - Four analysts are required to support maintenance of, and enhancements to, current system activities and to provide better support to patent and trademark operations;
  - Four positions are required for support to the integrated Automated Trademark System (ATS), including development of the assignment system and other special search indices. The positions support additional workload and extend operational capabilities. The Automated Trademark System (ATS) plan provides for the integration of TRAM and T-SEARCH into one single computer system and is planned to be fully operated by in-house staff. The implementation of the ATS will replace the current need for systems operations support provided by the T-SEARCH contractor;
  - Ten positions are required for APS operations support. As stated in the revised Automation Master Plan, when APS moves to its new computer site, the PTO will contract out operation of the APS computer system. However, the PTO will provide in-house support staff to supervise the operations, support scheduling and the tape library, support production and quality control, support the APS network and site equipment and to monitor contracts.

- The Office of System Engineering and Telecommunications (OSET) requests 14 positions for the following functions:

  - Six positions are required to supervise the operations of the Technical Control Facility (TCF) adjacent to the operations floor of the new computer facility. The TCF staff advises operations staff on problems, analyzes and diagnoses problems, monitors performance and availability, effects system software changes and performs other related functions. The PTO will contract the TCF operators, but the PTO intends to staff the supervision in-house. This is necessary for security, control, and policy management;
  - One position is required for central facility and user facility preparation;
  - One position is required to coordinate, document and control security measures and provide oversight of the TCF activities resulting from the production status of APS;
  - One position is required to lead an effort to develop a distributed simulation model to anticipate and evaluate the configuration performance leading to management alternatives for modifying the system architecture;
  - Two positions are required to provide dedicated support to the current hardware and software specialists;
  - Two computer assistants are required to supplement existing staff to provide both clerical and technical support;
  - One division manager is required to effectively manage these increased responsibilities.

In addition to the guidelines for Patent and Data Base Automation discussed in the Patent Process and Information Dissemination Automation sections, the PTO established the following guidelines for Current Systems for modification of the Automation Master Plan:

- Sufficient priority will be given to maintenance and enhancement of current information systems such that operational needs are satisfied in a timely manner.
- Steps will be taken to ensure adequate computing and storage capacity for growth and systems enhancements so that mission operations are not hampered or delayed.

Using these revised guidelines, current and outyear funding projections for Executive Direction Automation are (dollar amounts in thousands):

	1986		1987		1988		1989		1990		1991	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Base	151	$15,685	194	$14,583	226	$20,757	226	$24,724	226	$24,771	226	24,384
Projected Adjustments to Base	...	...	...	+690	...	+721	...	+192	...	+170	...	+198
Changes	+43	-1,102	+32	+5,484	...	+3,246	...	-145	...	-557	...	-1,094
Total	194	14,583	226	20,757	226	24,724	226	24,771	226	24,384	226	23,488

The revised Automated Master Plan, which supports this program increase of 32 positions, 24 FTE and $5,484,000 for Executive Direction Automation, will be transmitted to the Congress under separate cover.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Supervisory computer specialist	14	+1	+$44,430
Supervisory computer specialist	13	+1	+37,599
Supervisory computer operator	13	+1	+37,599
Computer specialist	13	+6	+225,594
Computer equipment analyst	13	+1	+37,599
Supervisory computer operator	12	+1	+31,619
Computer equipment analyst	12	+3	+94,857
Computer specialist	12	+4	+126,476
Computer operator	8	+2	+39,480
Computer assistant	8	+4	+78,960
Computer assistant	5	+5	+71,950
Computer clerk	5	+3	+43,170
Total Salaries		+32	+869,333
Less: Lapse		-8	-249,333
Total Permanent Compensation		24	+620,000
Personnel benefits			+107,000
Transportation of things			+21,000
Communications, utilities and other rentals			-218,000
Printing and reproduction			+ 7,000
Other services			+4,986,000
Supplies and materials			-128,000
Equipment			+89,000
Total			+$5,484,000

Automation Master Plan Summary

The original Automation Master Plan (AMP), mandated by Section 9 of P.L. 96-517 and transmitted to Congress in December 1982, was the outgrowth of a recognized need to improve patent and trademark operations with computer technology. The goals of the original AMP were:

1) To achieve full automation of the PTO by 1990 through acquisition of commercially available components;
2) To continue to operate and maintain current systems until replaced by the new comprehensive automated system, and;
3) To achieve incremental development over three stages.

The first edition of the AMP guided automation efforts since it was approved by the PTO ADP Coordinating Committee prior to its review and endorsement by the Department of Commerce and the Office of Management and Budget and submission to Congress. Since that time, many of the automation objectives were reached or substantial progress was made toward their attainment. Other objectives have been modified or extended as a result of developments that have occurred during that time. Accordingly, a revised Automation Master Plan, which supports the Automation budget changes, has been prepared. The purpose of the second edition of the AMP is to bring up-to-date both automation objectives and the program plan for their achievement. The revised Automation Master Plan will be transmitted to the Congress under separate cover.

Under the direction of the Commissioner of Patents and Trademarks, the ADP Coordinating Committee established the priorities for revision of automation schedules and objectives. For patents, first priority was given to implementing systems functions and features that would contribute to improving patent quality - file integrity through the electronic data bases and additional search tools to allow the data bases to be effectively used to improve quality. Secondary priority was given to installing cost effective and productivity improvements to enhance PTO operations and services to the public. For trademarks, beyond short-term improvements in data base quality and system operations, priority was given to integrating the trademark systems developed during the last three years and improving the level of performance to better support trademark operations and the public.

In accordance with these priorities the revised Automation Master Plan projects the deployment of the Automated Patent System (APS) in a series of releases, beginning in 1986 with the deployment of full text searching capabilities, using clusters of terminals located throughout the Office. This is to be followed in 1987 by deployment of full electronic searching using much more sophisticated electronic workstations and the file of U.S. Patents containing both electronic text and drawings. Other releases will enhance system capabilities through improved office automation, possibly electronic mail, and other features that support patent documentation and dissemination functions of the Office. A final release is related to the electronic file wrapper, the capability to electronically handle applications from their initial receipt through final disposal through the electronic system. These deployments will be preceded by more extensive testing and evaluation in the Patent Examining Group 220 testbed than originally projected. Test and evaluation has already begun for system components but will be expanded in 1986 to address all technical and operational aspects of the new Automated Patent System (APS). Test and evaluation of text search and full electronic searching will continue through 1987.

For trademark automation, short-range improvements will be made by mid-1986 and the longer range improvements, including replacement of the current, undependable computer systems, in late 1986 through 1987.

The costs of the PTO automation program were projected over a 20-year life cycle, as were the benefits.

The following table shows cost estimates for the AMP (1983-1991) in current dollars reflecting anticipated inflation beyond 1987. Table 1 bridges from the line item format to the four main system categories. These system categories are defined as follows:

Patent Automation - defined as the automation of patent related activities within the PTO through the implementation of the Automated Patent System (APS). Cost projections represent current cost estimates of the APS contract.
Trademark Automation - defined as the automation of trademark searching activities within the PTO through implementation of the Trademark Search System (T-SEARCH) through 1986, and the automation of trademark processing activities within the PTO through implementation of the integrated Automated Trademark System (ATS) from 1987 on.
Data Base Automation - defined as the automation of the patent and trademark data bases through the implementation of the Data Input/Output System (DIOS). DIOS includes systems for image and text capture which support APS and other PTO operations. Cost projections represent current PTO estimates of implementation costs.
ADP Support Systems - defined as those automation activities which support existing ADP systems and both the patent and trademark automation programs. Included in this category are the automation staff, various support contracts and the existing computer facility and related operations that monitor patent and trademark process work flows, and perform accounting and management information functions.

Table 1.

REVISED AUTOMATION MASTER PLAN - CROSSWALK TABLE
$000's Includes Inflation Outyears 1988-1991

Budget Activity	Year	Patent Automation	Trademark Automation	Data Base Automation	ADP Support System	Plan Total	Prior Year Carry-over	Revised Plan	Actual Total	Balance
Patent Process	1983	1860	...	...	1215	3075	...	3075	2225	850
	1984	5120*	...	...	1100	6220*	850	7070	7154	-84
	1985	8341	...	1990	75	10406	...	10406	10306	100
	1986	10082	...	4016	700	14798	329	15127		
	1987	17996	...	5949	500	24445				
	1988	29808	...	8137	312	38257				
	1989	35285	...	7612	323	43220				
	1990	36714	...	7749	335	44798				
	1991	34846	...	7992	345	43183				
Trademark Process	1983	...	416	...	517	933	...	933	517	416
	1984	...	580	...	...	580	416	996	996	...
	1985	...	305	...	...	305	200	505	581	-76
	1986	...	1184	...	...	1184	...	1184		
	1987	...	2085	...	...	2085				
	1988	...	1633	...	...	1633				
	1989	...	1692	...	...	1692				
	1990	...	1751	...	...	1751				
	1991	...	1806	...	...	1806				
Information Dissemination	1983	400	...	...	100	500	...	500	250	250
	1984	1180*	...	...	20	1200*	250	1450	1230	220
	1985	3885	...	...	140	4025	...	4025	4025	...
	1986	7500	...	2500	...	10000	...	10000		
	1987	6668	...	1927	...	8595				
	1988	10598	...	3557	...	14155				
	1989	10371	...	3136	...	13507				
	1990	12258	...	3042	...	15300				
	1991	11210	...	3136	...	14346				
Executive Direction and Administration	1983	2141	...	...	7455	9596	933	10529	9596	933
	1984	392	225	...	10650*	11267*	1218	12485	12423	62
	1985	838	2339	...	13145	16322	...	16322	15456	866
	1986	2500	...	416	11667	14583	2545	17128		
	1987	7855	...	359	12543	20757				
	1988	10548	...	799	13377	24724				
	1989	10710	...	635	13426	24771				
	1990	10244	...	541	13599	24384				
	1991	9168	...	558	13762	23488				

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Table 1 (cont.)

		Patent Automation	Trademark Automation	Data Base Automation	ADP Support System	Plan Total	Prior Year Carry-Over	Revised Plan	Actual Total	Balance	Budget Ac
Total	1983	4401	416	...	9287	14104	933	15037	12588	2449	
	1984	6692*	805	...	11770*	19267*	2734	22001	21803	198	
	1985	13064	2644	1990	13360	31058	200	31258	30368	890	
	1986	20082	1184	6932	12367	40565	2874	43439			
	1987	32519	2085	8235	13043	55882					
	1988	50954	1633	12493	13689	78769					
	1989	56366	1692	11838	13749	83190					
	1990	59216	1751	11332	13934	86233					
	1991	55224	1806	11686	14107	82823					

* Includes nonrecurring redeployment of resources, from Space and Patent Printing, to reflect actual APS contract provisions for FY '84.

Table 2, which follows, takes the new system category totals from the bottom of Table 1 and divides them into the following five components:

- Workstations - refers to cost items for the workstation configuration of each of the automated systems. There are four categories of workstations required to support the automated systems:

  - Full APS (text and image) workstations for examiner search and retrieval;
  - Text search (terminals for examiners) and office automation workstations for management information;
  - Print servers to control printed output from APS;
  - Data capture workstations for control of input to APS.

  The cost includes all associated hardware to support the workstation configuration.

- Other equipment - refers to cost items for system architecture for each of the automated systems. This cost includes all associated hardware to support full operations of each system not treated as a contractor service.
- Computer software - refers to cost items for the acquisition, license and development of all software to support the automated systems.
- Contractor services - refers to cost items for software and hardware maintenance, hardware replacement parts, all direct labor and overhead to support system development, software development, acquisition support and general support. This also includes hardware, software and other systems costs where such are imbedded in the cost of a contractor service, as well as costs associated with contractor fee and other administrative costs.
- Staff and support - refers to cost items for the existing ADP system, PTO staff and various contractor support for all automation areas.

Table 2.

REVISED AUTOMATION MASTER PLAN - CROSSWALK TO SYSTEM COMPONENTS
$000's - Includes Inflation Outyears 1988 - 1991

New Systems	Year	Work-stations	Other Equip-ment	Computer Software	Contractor Services	Staff & Support	Plan Total	Prior Year Carryover	Revised Plan	Actual Total	Balance
Patent Automation	1983	...	...	...	4401	...	4401	...	4401	2368	2033
	1984	...	130	330	6232*	...	6692*	1100	7792	8144	-352
	1985	444	1645	137	10838	...	13064	...	13064	14714	-1650
	1986	2614	6088	544	10836	...	20082	516	20598		
	1987	1671	7856	1212	21780	...	32519				
	1988	5250	26495	1219	17990	...	50954				
	1989	11379	33635	2034	9318	...	56366				
	1990	16658	34545	974	7039	...	59216				
	1991	16037	31806	538	6843	...	55224				
Trademark Automation	1983	...	...	...	416	...	416	...	416	...	416
	1984	171	371	52	211	...	805	1349	2154	2226	-72
	1985	512	1112	385	635	...	2644	200	2844	2793	51
	1986	238	522	41	383	...	1184	419	1603		
	1987	...	1575	...	510	...	2085				
	1988	...	1103	...	530	...	1633				
	1989	...	1142	...	550	...	1692				
	1990	...	1182	...	569	...	1751				
	1991	...	1219	...	587	...	1806				
Data Base Automation	1983	...	...	...	...	...	...	...	...	...	...
	1984	...	...	...	...	...	...	...	...	...	...
	1985	33	554	359	1044	...	1990	...	1990	636	1354
	1986	225	1768	125	4814	...	6932	329	7261		
	1987	...	527	...	7708	...	8235				
	1988	...	69	...	12424	...	12493				
	1989	...	72	...	11311	...	11383				
	1990	...	76	...	11256	...	11332				
	1991	...	80	...	11606	...	11686				
ADP Support Systems	1983	...	1120	...	1050	7117	9287	933	10220	10220	...
	1984	...	1211	...	2297*	8262	11770*	285	12055	11433	622
	1985	...	1251	...	1339	10770	13360	...	13360	12225	1135
	1986	...	1094	...	1561	9712	12367	1610	13977		
	1987	...	967	...	1971	10105	13043				
	1988	...	995	...	2090	10604	13689				
	1989	...	1032	...	2032	10685	13749				
	1990	...	1067	...	2102	10765	13934				
	1991	...	1101	...	2168	10838	14107				

Table 2 (cont.)

New Systems	Year	Work-stations	Other Equip-ment	Computer Software	Contractor Services	Staff Support	Plan Total	Prior Year Carryover	Revised Plan	Actual Total	Balance
Total	1983	...	1120	...	5867	7117	14104	933	15037	12588	2449
	1984	171	1712	382	8740*	8262	19267*	2734	22001	21803	198
	1985	989	4562	881	13856	10770	31058	200	31258	30368	890
	1986	3077	9472	710	17594	9712	40565	2874	43439		
	1987	1671	10925	1212	31969	10105	55882				
	1988	5250	28662	2219	33034	10604	78769				
	1989	11379	35881	2034	23211	10685	83190				
	1990	16658	36870	974	20966	10765	86233				
	1991	16037	34206	538	21204	10838	82823				

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* Includes nonrecurring redeployment of resources, from Space and Patent Printing, to reflect actual APS contract provisions for FY '84.

Changes for Fiscal Year 1987
Automation Summary

Patent Automation (APS)

Funding in FY 1987 for Patent Automation is spread among the following budget activities (dollars in thousands):

	1987 Base	Changes	1987 Estimate
Patent Process	$10,082	+$ 7,914	$17,996
Information Dissemination	7,500	-832	6,668
Executive Direction and Administration	2,500	+5,355	7,855
Total Patent Automation	$20,082	+$12,437	$32,519

FY 1987 funding will be used to:

- Provide for an increase of 60 text and image examiner workstations to be added to APS for a total of 115; an increase of 80 text search and office automation examiner workstations for a total of 105; and an increase of 40 workstations for photocomposition;
- Provide rapid access storage devices, high density storage devices such as multiple optical disk "jukeboxes," host-to-network interface devices, UNIX based "search engines" (back end processors), office automation processors, and a third mainframe processor;
- Provide for continued and increased support for all hardware and software maintenance and hardware parts cost;
- Provide for continued support of the prime contractor for services related to system development, software development, acquisition support, general support, fee, and other direct and administrative costs.

Major Automated Patent Systems milestones for FY 1987 include:

- Complete evaluation of the effectiveness and impact of APS search methods and techniques on search quality and productivity in several major areas of technology, including the use of supplemental indices and data bases such as English language abstracts of Japanese Patents, International Patent Classifications (IPC) for European Patents, and other supplemental indices and data bases.
- Begin evaluation of the practicality and usefulness of text-only and full APS (text and image) workstations for conducting all electronic searches by the public in pilot test conditions.
- Begin deployment of capabilities for text searching the U.S. Patent and other data bases using compatible terminals for the Local Area Network (LAN).
- Install the first non-testbed cluster of full-function APS workstations for operational use in all-electronic data base searching.
- Complete evaluation of the office automation features using Local Area Network (LAN) compatible terminals and full APS workstations as individual workstations or in clusters to support patent, administrative, and management functions.

Trademark Automation (ATS)

Funding in FY 1987 for Trademark Automation is provided as follows (dollars in thousands):

Budget Activity	1987 Base	Change	1987 Estimate
Trademark Process	$1,184	+$901	$2,085

FY 1987 funding will be used to implement the integrated Automated Trademark System (ATS):

- Provide for a more powerful processor compatible with unique T-SEARCH software; TRAM processing will be converted from the current B7700 computer; expanded disk storage space; laser printer; and an expanded image subsystem.
- The system will use the current T-SEARCH workstations to retrieve text and cropped image data; existing TRAM user equipment will be replaced by new equipment that is compatible with the new mainframe.
- Software for ATS will be obtained and developed by the systems contractor; commercial packages will be used for data base management and operating system software; application software will be developed by PTO and contractor personnel.
- In-house personnel will be used in the development and operation of ATS; contractor personnel will convert TRAM to operate on the new computer system; support for T-SEARCH licensed software will continue to be the responsibility of the licensor.
- Several data bases are required to store trademark information. While several separate data bases will exist, the trademark application software will integrate these into one logical information base.
- A commercial communication network package will be acquired to provide on-line support for the ATS.

Major milestones for the Automated Trademark System for FY 1987 include:

- Extend T-SEARCH to accomodate full registration page images, digitized at 300 points per inch, and to print high quality copies of those selected as a result of searching or on demand.
- Acquire and install computer systems and software needed to support integrated TRAM/T-SEARCH functions at the operational levels required for the Automated Trademark System.
- Develop and install software to allow additional indexing and on-line retrieval of Trademark Trial and Appeal Board information.
- Develop and install software to create and maintain the post-1955 active record assignment data base and provide on-line inquiry and reports.
- Develop and install software to allow the maintenance and on-line retrieval of applicant and registrant/ownership information.
- Develop and install software to allow system specifications to be maintained, indexed, and retrieved on-line by system development and maintenance personnel.

Data Base Automation (DIOS)

Funding in FY 1987 for Data Base Automation is spread among the following budget activities (dollars in thousands):

Budget Activity	1987 Base	Change	1987 Estimate
Patent Process	$4,016	+$1,933	$5,949
Information Dissemination	2,500	-573	1,927
Executive Direction and Administration	416	-57	359
Total Data Base Automation	$6,932	+$1,303	$8,235

FY 1987 funding will be used to:

- Provide for digitizing 19.0 million pages of patent images by the backfile contractor estimated at $5,405,000.
- Provide $2,000,000 for the initial design and installation of a system (or service) for the ongoing data capture of text and images of patent applications so that they can be prepared for photocomposition by APS.
- Provide $303,000 for the tape library which will be maintained in Boyers, Pennsylvania, as the source and back-up for all APS/ATS data.
- Provide $527,000 for continued leasing and to exercise the purchase option for local image capture equipment.

Major DIOS milestones for FY 1987 include:

- Complete loading of selected electronic text and digital images of Japanese and European patent documents for Group 220 testing.
- Begin capture of application text and image data, coding of chemical structure diagrams and tabular material to facilitate chemical structure coding, Markush searching, and searching coded tabular material.
- Begin using APS capabilities to photocompose patents for printing by GPO.

ADP Support Systems:
Funding in FY 1987 for ADP support systems is provided as follows (dollars in thousands):

Budget Activity	1987 Base	Change	1987 Estimate
Patent Process	$ 700	-$200	$ 500
Executive Direction and Administration	12,357	+186	12,543
Total ADP Support Systems	$13,057	-$ 14	$13,043

FY 1987 funding will be used to:

- Provide for a staffing increase due to implementation of the APS system and other new system development, and for system engineering support.
- Provide for a limited capability upgrade by replacement of the Burrough's B7700 computer for support of all current systems.
- Provide for reduced expenses relating to lease of equipment and supplies supporting current systems.

Major milestones for ADP Support for FY 1987 include:

- Procure and install a replacement system for PALM, TRAM and other current systems, including replacement of network equipment to be compatible with the APS Local Area Network.
- Acquire contractor services for operation of the APS system.

Revised Automation Master Plan
Actual FY 1985 Summary

The following section is included in response to a directive from the House Committee on Appropriations included in House of Representatives Report No. 98 - 226 which states:

> "The Committee directs the Patent and Trademark Office to include in each year's budget justifications a comparison of the planned costs and benefits and the planned schedule... versus the actual costs, benefits and schedule."

I. Planned versus Actual Costs

The following tables compare plan versus actual obligations for FY 1985 in two ways: by budget activity and by the new system categories:

FY 1985 Automation Obligations by Budget Activity
(Dollar amounts in thousands)

	Patent Process	Trademark Process	Information Dissemination	Executive Direction and Administration	Total
Budget Plan	$10,406	$305	4,025	$16,322	$31,058
Carryover/Reprogramming	...	+200	...	...	+200
Total Available	10,406	505	4,025	16,322	31,258
Actual Obligations	-10,306	-581	-4,025	-15,456	-30,368
Variance to Plan	$ 100	-$76	...	$ 866	$ 890

FY 1985 Automation Obligations by System Category
(Dollar amounts in thousands)

	Patent Automation	Trademark Automation	Data Base Automation	ADP Support Systems	Total
Budget Plan	$13,064	$2,644	$1,990	$13,360	$31,058
Carryover/Reprogramming	...	+200	...	...	+200
Total Available	13,064	2,844	1,990	13,360	31,258
Actual Obligations	-14,714	-2,793	-636	-12,225	-30,368
Variance to Plan	-$1,650	$ 51	$1,354	$ 1,135	$ 890

Unobligated balances of $890,000 in FY 1985 were unavoidable and due primarily to delays in procurement processing.

The following provides more detail on obligations by the new system categories.

Patent Automation Obligations: $14,714,000

- Automated Patent System (APS) contract for equipment, computer software and contractor services.
- The total amount was obligated to the APS contract for the following purposes:

  - Identification of component requirements,
  - Identification of integration requirements,
  - Identification of transition requirements and modifications with respect to existing and planned systems,
  - Analysis of cost/performance tradeoffs,
  - Specifications for final system architecture,
  - Preparation of and updates for implementation schedules,
  - Identification of design, development and acquisition requirements,
  - Development of acquisition strategies for components to be procured,
  - Establishment of evaluation and review structures for component acquisition,
  - Preparation and issue of RFP's for component acquisitions,
  - Evaluation of proposals,
  - Negotiation of contracts,
  - Awarding of contracts,
  - Initiation of Data Base loading.

Trademark Automation Obligations: $2,793,000

- T-SEARCH contract for lease and maintenance of equipment and software for T-SEARCH System ($2,517,000).
- Engineering changes to the original contract for changes in hardware, image loading, quality control, and software enhancements ($276,000).

Data Base Automation Obligations: $636,000

- The Data Input/Output System (DIOS) for equipment, and contractor services.
- Local image capture system for EPO Patent documents ($636,000).

ADP Support Systems Obligations: $12,225,000

- Compensation and benefits for Automation Staff, ($5,864,200),
- System engineering contract, ($1,763,400),
- Rental and maintenance for current systems, ($1,566,100),
- Supplies and miscellaneous equipment for current systems ($620,200),
- Support contracts for current systems ($926,400),
- Travel, shipping, and printing ($57,400),
- Miscellaneous rentals, supplies and equipment ($325,200),
- Miscellaneous services/maintenance ($548,200),
- Miscellaneous general expenses ($578,900).

II. Planned versus Actual Benefits

The Revised Automation Master Plan did not address planned benefits for FY 1985.

Schedule of Major Automation Events for FY 1985 through FY 1987

Automated Patent System (APS)/ Data Base Automation (DIOS)	1986 Congressional Schedule	1987 Congressional Schedule	Comments
Install Mainframe I at the System Development Laboratory (SDL) at Dulles	February 1985*	February 1985*	Installed on schedule
Install Mainframe II at the Crystal Mall I computer site at the PTO	April 1985	March 1985*	Installed Ahead of schedule
Begin post 1975 text data base loading	N/A	July 1985*	Additional Milestone to 1987 Congressional Schedule
Award backfile image capture contract	May 1985	November 1985*	Slippage due to procurement delays
Begin and end full text search system evaluation	August 1985	2nd QTR. 1986	On schedule selection of a more effective alternative technical solution for the Group 220 capture
Begin installation of Group 220 image backfile	September 1985	2nd QTR. 1986	Slippage due to backfile
Begin installation of EPO/JPO 220 backfile	September 1985	1st QTR. 1986	Installation began in 1st Quarter
Install Group 220 Local Area Network (LAN)	1st QTR. 1986	1st QTR. 1986	On schedule
Complete evaluation of APS full-text search features	N/A	2nd QTR. 1986	Additional Milestone to 1987 Congressional Schedule
Install APS workstations for Group 220 testbed	1st QTR 1986	3rd QTR. 1986	Slippage due to industry requests for additional time to develop technical proposals
Begin Group 220 image search software studies	1st QTR. 1986	N/A	Included in "Begin Full Text Search System Evaluation"

Automated Patent System (APS)/ Data Base Automation (DIOS)	1986 Congressional Schedule	1987 Congressional Schedule	Comments
Acquire stage 2 computer site	1st QTR. 1986	1st QTR. 1986	Site Acquired - Occupancy 3rd. QTR. 1986
Complete loading post-1975 patent text data base	N/A	2nd QTR 1986	Additional Milestone to 1987 Congressional Schedule
Complete loading Group 220 image data base	N/A	3rd QTR. 1986	Additional milestone to 1987 congressional schedule
Complete preliminary evaluation of classified search using image retrieval features and text search with image retrieval	N/A	4th QTR. 1986	Additional milestone to 1987 congressional schedule
Complete evaluation of office automation features using LAN compatible terminals and APS workstations	N/A	1st QTR. 1987	Additional milestone to 1987 congressional schedule
Complete loading Group 220 JPO/EPO data	N/A	1st QTR. 1987	Additional milestone to 1987 congressional schedule
Complete quality and productivity evaluation of APS search methods and techniques	N/A	2nd QTR. 1987	Additional milestone to 1987 congressional schedule
Begin evaluation of Pilot Public Search Room-practicality and usefulness of all-electronic searches by the public	N/A	2nd QTR. 1987	Additional milestone to 1987 congressional schedule
Begin deployment of APS text searching	N/A	1st QTR. 1987	Additional milestone to 1987 congressional schedule
Begin ongoing DIOS data capture	2nd QTR. 1986	4th QTR. 1987	Schedule to realign data base delivery with extended Group 220 testbed adjustment
Begin APS photocomposition coding	N/A	4th QTR. 1987	Additional milestone to 1987 congressional schedule

	1986 Congressional Schedule	1987 Congressional Schedule	Comments
Automated Patent System (APS)/ Data Base Automation (DIOS)			
Initiate electronic file wrapper (EFW) capability for Group 220	3rd QTR. 1986	3rd QTR. 1989	Delayed due to lowered priority of this function in revised AMP
Begin photocomposition software evaluation	4th QTR. 1986	1st QTR. 1988	Slippage due to new priority
Initiate chemical structure search	4th QTR. 1986	N/A	Included under text searching ability
Initiate patent copy sales	1st QTR. 1987	4th QTR. 1988	Slippage due to change in priority
Initiate full local area network (LAN)	1st QTR. 1987	N/A	Included in install first non-testbed cluster of full-function APS workstations
Install ongoing file wrapper capability	2nd QTR. 1987	3rd QTR. 1990	Slippage due to lowered priority
Install first non-testbed cluster of full-function APS workstations	2nd QTR. 1987	4th QTR. 1987	Slippage due to extended evaluation of procurement proposal
* Indicates the event occurred or was completed			
Trademark Automation (TRAM, T-SEARCH, ATS)			
Install TRAM 2 at the Trial and Appeal Board	October 1984*	October 1984*	Installed on schedule
Complete search system for examiner image searching	December 1984*	December 1984*	Completed on schedule
Install data base print capability-parallel processing	January 1985*	January 1985*	Installed on schedule
Initiate use of automated photocomposition to produce the Trademark Official Gazette (OG)	February 1985*	February 1985*	Initiated on schedule
Complete search system testing and cutover	March 1985	March 1985*	Completed on schedule
Train public users	July 1985	N/A	Postponed indefinitely

Trademark Automation (TRAM, T-SEARCH, ATS)	1986 Congressional Schedule	1987 Congressional Schedule	Comments
Correct mandatory data elements of data base	July 1985	September 1985*	On schedule
Install text editing for TRAM 2	July 1985	2nd QTR. 1986	Incorporated with new ATS initiative
Install Trademark search system terminals for public use	September 1985	N/A	Postponed indefinitely
Install Trademark assignments	September 1985	N/A	Incorporated with new ATS initiative
Install and test image capture system	N/A	1st QTR. 1986	New initiative
Develop and install "Notice of Abandonment" software	N/A	1st QTR. 1986	New initiative
Complete capture of full Registration page image	N/A	2nd QTR. 1986	New initiative
Load revised design search codes	N/A	4th QTR. 1986	New initiative
Provide full Registration page images by ATS	N/A	1st QTR. 1987	New initiative
Install integrated Automated Trademark System (ATS) for TRAM/T-SEARCH	1st QTR. 1987	1st QTR. 1987	New ATS initiative more comprehensive than last year
Develop and install adversary proceedings index, assignment processing data base, applicant and registrant index	N/A	2nd QTR. 1987	New initiative
Current Systems- ADP Support			
Procure and install replacement system for Burroughs B7700's	N/A	1st QTR. 1987	New initiative
Acquire contractor services for APS operations	N/A	3rd QTR. 1987	New initiative

Justification of Program and Performance

(Dollar amounts in thousands)

Activity: Offsetting Fee Collections

	1985 Actual Amount	1986 Currently Available Amount	1987 Base Amount	1987 Estimate Amount	Inc. (+) or Dec. (-) from 1987 Base Amount
Offsetting Fee Collections:					
Patent Process......................	$ 66,738 (59,613)	$ 82,136 (85,063)	$ 69,788	$ 77,603	+7,815
Trademark Process..................	14,137 (13,023)	12,876 (14,528)	13,290	14,607	+1,317
Information Dissemination...........	18,701 (17,725)	27,518 (28,124)	24,423	24,130	-293
Executive Direction and Administration.................	9,765 (9,074)	12,949 (13,729)	11,985	15,487	+3,502
Total Request.......................	109,341 (99,435)	135,479 (141,444)	119,486	131,827	+12,341
Less: Prior Year Trademark and Trademark Service Fee Collections	-2,052 (-2,052)	...	...	...	...
Less: Financing from Deferral of Prior Year Patent and Service fees.......	...	-15,993 (-15,993)	...	...	...
Actual/budgeted fee collections......	107,289 (97,383)	119,486 (125,451)	119,486	131,827	+12,341

NOTE: Amounts in parentheses correspond to obligations of fee collections.

Goals and Objectives

Goal

To offset by user fee collections portions of the processing costs of the Patent and Trademark Office in order to support the program goals of the PTO.

Objective

To utilize fee collections to reduce patent pendency, maintain present trademark pendency and improve public services.

Base Program

The Patent and Trademark Office charges fees for processing patents and trademarks, and providing services, in accordance with the guidelines of Public Law 97-247. These fees are distributed to PTO budget line items to offset the operating costs of the PTO, as shown in the table on PTO-72. Public Law 97-247, which was enacted on August 27, 1982, provided for the following:

1. Establishment of statutory fees for patents (Section 41(a) and Section 41(b) of title 35, United States Code) and authorization to administratively set trademark and service fees;
2. Adjustment of patent fees on October 1, 1985, and every third year thereafter, to reflect fluctuations in the Consumer Price Index (CPI), (Section 41(f) of title 35, United States Code);
3. Adjustment of trademark processing fees and trademark service fees not more than once every three years;
4. Adjustment of other patent and service fees (as defined in Section 41(d) of title 35, United States Code), after sixty days notice to the public, to recover the estimated average cost to the PTO for providing these services;
5. Reduction by 50 percent of the patent processing fees (Section 41(a) and (b)) charged to independent inventors, small businesses, and nonprofit organizations (e.g., universities);
6. Prohibition against using trademark fee revenues to support any activities other than the trademark functions.

The Administration has determined that an improvement in the quality and timeliness of patent and trademark production and services will stimulate technological innovation, encourage capital investment, and directly contribute to the achievement of a principal Administration goal: the strengthening of the American economy. This enhancement of PTO productivity requires additional resources available only through user fees.

The PTO fee structure enables the costs of specialized programs to be offset by fees charged to program beneficiaries. Thus, trademark owners, who derive unique benefits from trademark registration, immediately bear the full cost of registration. The benefits of patent protection, likewise, primarily accrue to patent holders. They will bear the total costs of patent processing, over the seventeen year life of the patent, through the payment of maintenance fees.

The accumulated surplus of $15,993,000 earned during PTO's first fee cycle (1983-1985) was used to offset the program increases needed in 1986 to continue progress toward the goals of the PTO. These revenues were generated because the demand for certain services not previously offered exceeded our expectations. In addition, the general level of patent application receipts increased beyond projections. This surplus accumulated over the first fee cycle is not anticipated to recur to any great extent in the future. The 1986 offset of budget authority, therefore, is a non-recurring item. Future requests for budget authority are designed to reflect PTO true program needs minus projected actual earnings.

Fee revenues are essential for the achievement of PTO objectives. These objectives are:

(1) To reduce the time of patent application pendency to 18 months by the end of 1987 and improve patent quality.
(2) To maintain trademark application pendency at three months to first action and 13 months to disposal.
(3) To automate the Patent and Trademark processes by 1990.

Second Cycle (1986-1988) Fee Projections

On October 5, 1985, the PTO implemented a revision of patent and patent service fees for the period of 1986-1988. The principle components of the revised rules are:

1. Statutory patent fees set forth in Section 41(a) and Section 41(b) of title 35, United States Code, were adjusted to reflect fluctuations occurring during the previous three years in the Consumer Price Index (CPI), as authorized by Section 41(f) of title 35, United States Code;
2. Fees for processing, services, or materials related to patents have been adjusted by the Commissioner in accordance with Section 41(d) of title 35, United States Code, to recover the estimated average cost to the PTO of such processing, services, or materials;
3. Fees for filing and processing an application under the Patent Cooperation Treaty have been adjusted by the Commissioner to recover the estimated average cost of such processing in accordance with Section 376 of title 35, United States Code.
4. Adjustment to fees for filing and processing a trademark application and for other processing, services or materials related to trademarks have not yet been proposed.

The budget implications of the Second Cycle fee schedule follow:

1. Patent fees (Section 41(a) and Section 41(b)) have been increased by the CPI adjustment of 11.7 percent for the prior three year (1983-1985) period. After application of the 11.7 percent CPI fluctuation rate, fees were rounded by applying standard arithmetical rules so that the amounts rounded would be de minimus and convenient to the user.
2. Patent and service fees authorized under Section 41(d) were established "... to recover the estimated average cost to the Office of such processing, services or materials." These non-statutory fees were derived in accordance with OMB Circular A-25 guidelines. Costs were determined from the best available records and included direct and indirect costs to the PTO of carrying out the activity. Since these non-statutory fees are expected to remain in place for the three year fee cycle 1986-1988, the calculated costs were then adjusted by a mid-cycle inflation rate of 6.21 percent derived from the Administration's inflation projections. Amounts were then rounded de minimus.
3. Section 376 of title 35, United States Code, authorizes the Commissioner to set fees for patent applications filed under the Patent Cooperation Treaty (PCT). These service fees under the PCT are keyed to full cost recovery.
4. This budget request presents Trademark costs which must be offset by Trademark fees. Revised Trademark fees will be established by the beginning of fiscal year 1987.

Fee Collections by Function

Fees are collected for three major functions performed by the PTO -- processing patents, processing trademarks, and providing services. The fee collections shown on PTO-72 represent fees distributed to PTO budget line items to offset program costs, rather than fees "collected" by that budget line item. Individual fee types generally cannot be credited to any one cost center or budget line item because many PTO cost centers contribute effort necessary to accomplish the task for which the fee is paid. Therefore, no cost center or budget line item has an irrevocable claim to a particular fee. Fees are distributed to PTO budget line items primarily for budget presentation requirements. The fee collections expected for the three major functions performed by the PTO are shown in the following table:

Summary of Workload and Performance
(Dollars in Thousands)

Fee Collections by Function:	1984 Actual	1985 Actual	1986 Estimate	1987 Base	1987 Estimate	Inc. (+) or (-) from 1987 Revised Base
Patent Process	$ 72,644	$ 80,457	$ 92,362	$ 92,699	$103,409	$+10,710
Trademark Process	17,070	16,192	16,689	16,352	17,965	+ 1,613
Services	9,127	10,640	10,435	10,435	10,453	+18
Total	$ 98,841	$107,289 1/	$119,486 2/	$119,486	$131,827	$+12,341
Less Budgeted Offsetting Collections	-88,526	-98,974	-135,479	-119,486	-131,827	-12,341
Surplus/Deficit for year	+10,315	+8,315	-15,993	...	...	...
Cummulative fee surplus brought forward	+ 3,655	+13,970	+20,233	...	...	...
Less applied Patent and Patent Service fees surplus	...	...	-4,132 3/	...	...	...
Less applied Trademark and Trademark Service fees surplus	...	-2,052	-108 3/	...	...	...
Cumulative fee surplus	+13,970	+20,233	...	...	...	...

1/ The 1985 plan is adjusted upward +$390,000 to reflect reconfiguration of farecard transactions with contractor.

2/ The 1986 and 1987 estimates are based on the historical data derived from the first fee cycle (1983-1985) and assume continued upward trends in fee collections. The historical trends available for projections are limited and, in addition, the PTO is not able to control or to direct external demand for PTO services. The accuracy of PTO's fee projections increases as more workload data are accumulated.

3/ Surplus 1985 fee income was applied to offset pay raise requirements as directed by Congress in the 1986 Appropriation Act.

Application of Surplus Fee Revenues

The first cycle fee estimates were consistent with the Administration proposal to establish a fee schedule that recovers an estimated proportion of program costs. It was contemplated that, as the total resource requirements grew in response to the Automation Master Plan implementation and the pendency initiatives, the fee schedule would be raised to keep the cost recovery percentages stable. This would mean that increases in program level would be partially offset by increases in fees collected. In this manner the beneficiaries of the enhanced patent and trademark system would share the burden of paying for it. This was the publicly stated Administration policy.

The Patent and Trademark Office will employ additional user fees of the first cycle to offset program increases and pay cut restoration costs in 1986 since the accumulated fees exceed appropriated expenses offset by fees.

The origin of the "excess" fees is unanticipated workload which must be processed by the Office. Despite increases in workload caused by new offerings of services or unanticipated growth in innovative activity, the Office continues to maintain our goal of "3/13" in Trademarks and make progress toward "18 by 87" in Patents. We intend to hold to our goals and schedule within the total resource levels contained in this, and in our prior requests.

Changes For Fiscal Year 1987

(Dollar amounts in thousands)

	1987 Base Amount	1987 Estimate Amount	Inc. (+) or Dec. (-) Amount
Fee Collections............................	$119,486	$131,827	+$12,341

The offsetting fee estimates shown in this request reflect the portion of PTO program costs required to be funded by fee collections. An 11.7% increase in the statutory patent fee schedule was implemented in 1986 to provide funding support during the 1986-1988 fee cycle for the increased costs of patent processing attributable to inflation over the prior three years. These fee estimates include:

- The projected impact on collections attributable to the 50 percent reduction in anticipated revenues from independent inventors, small businesses, and non-profit organizations.
- The P.L. 97-247 fee structure enables inventors to pay for the costs of patent processing at various stages over the life of the patent. An application fee is charged when the patent application is filed; an issue fee is charged when the patent is granted; and maintenance fees are charged 3½ years, 7½ years, and 11½ years after issue if the patent holder desires to keep the patent in force. No other country in the world has a maintenance fee structure like the United States. This limits the PTO's fee forecasting ability in the area of maintenance fees.
- Fee and subsidy estimates are based on CPI estimates and are subject to revision as the actual impact of higher fees, inflation, other economic factors and the demand for PTO services become known and more accurate forecasts become possible.

These estimates are consistent with the Administration's plan, proposed in 1982, to achieve the patent and trademark pendency goals by requiring the principal beneficiaries of an enhanced Patent and Trademark Office to bear an appropriate portion of the cost of operating the PTO. Without the fee generated resources, PTO would be required to reduce significantly the present Patent and Trademark examining staff. This would cause increases in pendencies and inventories of backlogged cases and jeopardize the goals and objectives for 1987.

1986 Bridge to Current Estimate
(dollar amounts in thousands)

Appropriation: Salaries and Expenses Activity/Line Item	1986 Enacted Perm. Pos.	1986 Enacted Amount	Changes Perm. Pos.	Changes Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount
Patent Process:						
Examination-professional..............	1,519 (1,490)	$100,701	...	...	1,519 (1,490)	$100,701
Examination-clerical..................	526 (544)	15,130	...	...	526 (544)	15,130
Appeals and interferences.............	...	...	+83 (+79)	+4,368 1/	83 (79)	4,368
Appeals...............................	64 (60)	3,253	-64 (-60)	-3,253	...	...
Interferences.........................	19 (19)	1,115	-19 (-19)	-1,115	...	...
Patent printing.......................	...	17,620	...	...	...	17,620
Subtotal..........................	2,128 (2,113)	137,819	...	...	2,128 (2,113)	137,819
Trademark Process:						
Examination of trademarks.............	232 (225)	10,869	...	...	232 (225)	10,869
Trial and Appeal Board................	30 (30)	1,317	...	...	30 (30)	1,317
Trademark printing....................	...	690	...	...	...	690
Subtotal..........................	262 (255)	12,876	...	...	262 (255)	12,876
Information Dissemination:						
Customer services.....................	121 (125)	10,626	...	+982 2/	121 (125)	11,608
Publication services..................	119 (112)	3,767	...	...	119 (112)	3,767
Data and document retrieval systems...	281 (289)	26,658	...	...	281 (289)	26,658
Subtotal..........................	521 (526)	41,051	...	+982	521 (526)	42,033

Appropriation: Salaries and Expenses	1986 Enacted		Changes		1986 Currently Available	
Activity/Line Item	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Executive Direction and Administration: 3/						
Commissioner	9	$ 479	...	+$52	9	$ 531
	(9)				(9)	
Solicitor	25	1,433	...	+158	25	1,591
	(24)				(24)	
Legislation and international affairs.	24	1,014	...	+114	24	1,128
	(23)				(23)	
Management planning	49	2,169	-2	+140	47	2,309
	(50)		(-2)		(48)	
Administrative services	180	6,147	+2	+125	182	6,272
	(213)		(+2)		(215)	
Automation	194	15,172	...	-589	194	14,583
	(186)				(186)	
Quality review	16	1,037	...	...	16	1,037
	(15)				(15)	
Subtotal	497	27,451	...	...	497	27,451
	(520)				(520)	
Total requirements	3,408	219,197	...	...	3,408	220,179
	(3,414)		(...)	+982	(3,414)	

1/ Reorganization in accordance to Public Law 98-622 which combined the Board of Appeals and the Board of Patent Interferences.

2/ Farecard contract to be funded by the fee collections.

3/ Redistribution of the 10% Administrative Reduction.

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Object Class	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			
	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Emp. 12/31
11 Personnel compensation:										
11.1 Full-time permanent positions............	3,408	3,317	$110,687	3,401	3,259	$111,338	-7	-58	+$651	3,064
11.3 Positions other than permanent...........	227	119	1,814	227	119	1,814	...	...	...	201
11.5 Other personnel compensation.............	...	175	5,894	...	162	5,510	...	-13	-384	...
Total..............................	3,635	3,611	118,395	3,628	3,540	118,662	-7	-71	+267	3,265
Other Objects:										
12 Personnel benefits........................			15,055			15,165			+110	
21 Travel and transportation of persons.....			267			294			+27	
22 Transportation of things..................			294			315			+21	
23 Rent, communications and utilities:										
23.1 Standard level user charges..............			17,152			17,178			+26	
23.3 Communications, utilities & other rent...			6,106			7,417			+1,311	
24 Printing and reproduction................			19,183			19,872			+689	
25 Other services...........................			46,793			60,095			+13,302	
26 Supplies and materials...................			2,325			2,160			-165	
31 Equipment................................			1,577			2,286			+709	
Total requirements..................			227,147			243,444			+16,297	
Offsetting fee collections...............			-119,486			-131,827			-12,341	
Financing from deferral of prior year funds.................................			...			-1,977			-1,977	
Financing from unobligated balance of prior year funds.......................			...			-8			-8	
Appropriation requested..................			$107,661			$109,632			+$1,971	

Justification by Object Class
(Dollar amounts in thousands)

	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			
	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Emp. 12/31
11.1 Permanent positions										
General schedule	3,313	3,225	$105,175	3,306	3,167	$105,826	-7	-58	+$651	2,982
Wage board	16	16	306	16	16	306	...	...	...	15
Executive level	1	1	72	1	1	72	...	...	...	1
P.L. 82-593, P.L 98-622 Examiner of patent appeals and interferences	38	38	2,607	38	38	2,607	...	...	...	33
P.L. 80-313, Scientific and professional	4	1	69	4	1	69	...	...	...	...
P.L. 98-622, Examiner of TM Appeals	8	8	527	8	8	527	...	...	...	7
Senior Executive Service	28	28	1,931	28	28	1,931	...	...	...	26
Total, permanent positions	3,408	3,317	110,687	3,401	3,259	111,338	-7	-58	+651	3,064
11.3 Positions other than full-time permanent										
General schedule	209	109	1,691	209	109	1,691	...	...	...	201
Experts and consultants	3	1	24	3	1	24	...	...	...	...
Wage board	5	1	19	5	1	19	...	...	...	...
Hourly	10	8	80	10	8	80	...	...	...	...
Total, positions other than perm.	227	119	1,814	227	119	1,814	...	...	...	201
11.5 Other personnel compensation										
Overtime	...	175	5,407	...	162	5,019	...	-13	-388	
Cash awards	...	...	461	...	...	465	...	...	+4	
Other	...	...	26	...	...	26	...	...	...	
Total, other personnel comp.	...	175	5,894	...	162	5,510	...	-13	-384	
12.1 Personnel Benefits										
Civil Service Retirement			7,748			7,794			+46	
Federal Insurance Contributions (FICA)			3,591			3,636			+45	
Health insurance			3,205			3,221			+16	
Life insurance			363			366			+3	
Employees Compensation Fund			148			148			...	
Total, personnel benefits			15,055			15,165			+110	

Justification by Object Class
(Dollar amounts in thousands)

Object Class	1987 Base Pos.	1987 Base Work-years	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Work-years	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Work-years	Inc. (+) or Dec. (-) Amount	Inc. (+) or Dec. (-) Emp. 12/31
21.0 Travel and transportation of persons										
Per diem..............................			103			130			+27	
Air fare..............................			116			116			...	
Other common carrier..................			6			6			...	
Privately-owned automobiles..........			4			4			...	
GSA vehicles..........................			38			38			...	
Total, travel and transportation of persons......................			267			294			+27	
22.0 Transporation of things										
Parcel post...........................			253			253			...	
Other.................................			41			62			+21	
Total, transportation of things...			294			315			+21	
23.1 Standard level user charges..........			17,152			17,178			+26	
23.3 Communications, utilities & other rent										
Federal telecommunications systems....			570			585			+15	
Other telephone, telegraph & teletype.			1,617			1,638			+21	
Postal services by USPS...............			1,264			1,287			+23	
Utilities services....................			338			338			...	
Rental of ADP equipment...............			1,394			2,719			+1,325	
Rental of office copying equipment....			597			597			...	
Other equipment rental................			326			253			-73	
Total, communications, utilities and other rent................			6,106			7,417			+1,311	

Justification by Object Class
(Dollar amounts in thousands)

	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			
	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Emp. 12/31
Object Class										
24.0 Printing and reproduction										
Publications			137			137			...	
Envelopes			27			27			...	
Patent printing			17,620			17,971			+351	
Trademark printing			690			690			...	
Administrative printing			349			661			+312	
Binding operations			12			12			...	
Internal use forms			178			204			+26	
Briefs			10			10			...	
Working Capital Fund			160			160			...	
Total, printing and reproduction			19,183			19,872			+689	
25.0 Other services										
Training:										
University			211			443			+232	
Office of Personnel Management			25			35			+10	
Other			205			238			+33	
Maintenance of equipment			742			1,089			+347	
Guard service			216			216			...	
GSA alterations and repairs			968			968			...	
Working Capital Fund			2,345			2,373			+28	
Other Commerce agencies			46			46			...	
Other contracts			42,035			54,687			+12,652	
Total, other services			46,793			60,095			+13,302	

STATEMENT OF DONALD J. QUIGG, ASSISTANT SECRETARY OF COMMERCE AND COMMISSIONER FOR PATENTS AND TRADEMARKS

Mr. QUIGG. Thank you, Mr. Chairman. I appreciate the opportunity to support the President's request for appropriations for the Patent and Trademark Office for fiscal year 1987.

Since 1982, the PTO has been pursuing the following three-point program: to reduce the average time it takes to get a patent to 18 months; to register trademarks in 13 months, with a first opinion on registrability given in three months; and to automate the operations of the Patent and Trademark Office by 1990.

We have made significant progress toward these goals, and we are on course to achieve our patent pendency target for 1986, marking the fifth consecutive year that actual production will have exceeded planned goals. In 1985, we reached the trademark pendency goal of three months to first action and 13 months to registration, and in 1986 we will continue to refine our Automated Trademark System and plan to complete the installation of the Automated Patent System in Examining Group 220, where we will test our electronic patent searching and examining concepts.

The 1987 program level request for the Patent and Trademark Office is $243,444,000 and 3,401 positions, an increase of $16,297,000 and a decrease of seven positions in program changes from the 1987 base. The base includes net increases of $6,968,000 to offset price increases and other mandatory adjustments, such as the restoration of the proposed 5 percent pay cut at $4,745,000 to the 1986 appropriated level of $220,179,000. With projected offsetting user fee receipts and utilization of funds from the prior year, the 1987 budget authority requested is 45 percent of our operating costs, or $109,632,000. This is a net increase of $24,932,000 when compared to the 1986 appropriation level; however, the largest portion of this increase, $15,993,000, is the restoration of budget authority from the one-time application of accumulated excess fees as an offset to the 1986 budget authority level.

Our budget request for 1987 proposes funding adjustments for our three major programs.

For the patent pendency reduction programs, we request an increase of $932,000. This funding will allow us to replace critical patent examiners lost to attritions, to promote our less senior examiners as their productivity warrants, and to improve the support services for the examining corps, that is, mail processing, microfilming, patent copying, and printing services. Increased staff and funds are needed to keep the Board of Patent Appeals and Interferences in pace with the growing numbers of appeals generated by the enlarged examining corps. In addition, funds are needed to prepare examiner work sites for the expanded Automated Patent System. There is a net decrease of 48 positions in patent pendency reduction programs in this budget proposal.

The 1987 budget proposes to relinquish 57 professional examiner positions which reflects the orderly phase-down from our massive backlog reduction effort to steady state production. By the end of fiscal year 1986, average pendency time will be 21.1 months. The resources we request for 1987 will allow us to dispose of 130,000 applications and continue to reduce average pendency time toward our 18-month goal.

For trademarks, we request an increase of 9 positions and $738,000. The increased resources will permit us to maintain the 3/13 pendency level, augment the Trademark Trial and Appeal Board, maintain the "paper" trademark public search room, and enhance the automated trademark data base, operational since 1985.

For our automation program, we request an increase of 32 positions and $14,627,000. The 1987 automation funding and staffing changes are reflected in the revised Automation Master Plan that was distributed to the Congress, user groups, and industry last month. The requested increase will provide for the extended testing and evaluation of the Automated Patent System, the deployment of approved functional capabilities to our Patent Examining Groups, the replacement of our current computer systems, and the integration of the existing automated trademark searching and monitoring systems. The increased positions are needed to augment our staff in systems engineering and data base management.

On October 5, 1985, statutory patent fees were increased by 11.7 percent, reflecting the changes to the Consumer Price Index over the past three years as permitted by section 41(f) of Title 35 of the United States Code. Patent service fees were adjusted to recover the full estimated costs of providing these services for the 1986-1988 cycle. Trademark fees will be set on October 1 of this year to recover the full projected costs of processing trademarks. Given this combination of user fees and taxpayer support, we are confident the PTO will continue to improve the timeliness, quality and reliability of its products and services.

Mr. Chairman, that concludes my statement. I will be pleased to respond to your questions.

[Statement of Mr. Quigg follows:]

STATEMENT BY ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS
DONALD J. QUIGG
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON COMMERCE, JUSTICE, STATE, THE JUDICIARY AND RELATED AGENCIES

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I APPRECIATE THE OPPORTUNITY TO SUPPORT THE PRESIDENT'S REQUEST FOR APPROPRIATIONS FOR THE PATENT AND TRADEMARK OFFICE FOR FISCAL YEAR 1987. WITH ME TODAY ARE: RENE TEGTMEYER, ASSISTANT COMMISSONER FOR PATENTS, MARGARET LAURENCE, ASSISTANT COMMISSIONER FOR TRADEMARKS, BRAD HUTHER, ASSISTANT COMMISSIONER FOR FINANCE AND PLANNING AND JAMES LYNCH, BUDGET OFFICER.

GOALS OF THE PTO

SINCE 1982, PTO HAS BEEN PURSUING THE FOLLOWING THREE-POINT PROGRAM:

° TO REDUCE THE AVERAGE TIME IT TAKES TO GET A PATENT TO 18 MONTHS.

° TO REGISTER TRADEMARKS IN 13 MONTHS, WITH A FIRST OPINION ON REGISTRABILITY GIVEN IN THREE MONTHS.

° TO AUTOMATE THE OPERATIONS OF THE PATENT AND TRADEMARK OFFICE BY 1990.

WE HAVE MADE SIGNIFICANT PROGRESS TOWARD THESE GOALS:

- WE ARE ON COURSE TO ACHIEVE OUR PATENT PENDENCY TARGET FOR 1986, MARKING THE FIFTH CONSECUTIVE YEAR THAT ACTUAL PRODUCTION WILL HAVE EXCEEDED PLANNED GOALS;

Justification by Object Class
(Dollar amounts in thousands)

	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			
	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Pos.	Work-years	Amount	Emp. 12/31
26.0 Supplies and materials										
ADP supplies......................			383			325			-58	
Paper for office copying equipment.			297			301			+4	
Books and periodicals.............			509			509			...	
Other.............................			1,136			1,025			-111	
Total, supplies and materials...			2,325			2,160			-165	
Object Class										
31.0 Equipment										
ADP equipment.....................			$574			$1,190			+$616	
Office machines and equipment......			620			713			+93	
Furniture.........................			201			201			...	
Other.............................			182			182			...	
Total, equipment................			1,577			2,286			+709	
Total requirements.............			227,147			243,444			+16,297	

Patent and Trademark Office

Salaries and Expenses

Average Grades and Salaries

	1985	1986	1987
Average ES salary	$68,974	$68,974	$68,974
Average GS grade	9.69	9.95	10.01
Average GS salary	$32,322	$33,399	$33,987

Patent and Trademark Office
Salaries and Expenses

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$ 1	$ 24	$ 24
Management and professional services	19	32	32
Special studies and analyses	5	20	28
Management and support services for research and development	...	...	...
Total - all types	25	76	84
Amount withheld from obligation pursuant to P.L. 99-190	...	- 8	...
Total requested	25	68	84

Consulting services for FY 1985 consisted of the appointment of a contractor to review the government's installation specifications for an uninterruptible power supply system and to provide advice on completeness and adherence with the National Electrical Code and sound engineering practices. $1,000

Management and professional services were acquired during FY 1985 from:

- Various arbitrators during employee union hearings with POPA (Patent Office Professional Association) and TSI (Trademark Society, Incorporated) to settle disputes over groundrules, performance appraisal standards, performance evaluations for signatory authority, employee learning curves, and relocation of employees. $10,000
- An independent contractor to review the position descriptions of automation personnel and to prepare an organizational change proposal for the Department of Commerce. $9,000

Special studies and analyses were performed during FY 1985 by an independent contractor to determine the suitability of three Dietzgen cameras for the continued use of the cameras by a PTO contractor. (The PTO contractor was claiming excessive downtime.) $5,000

In accordance with Public Law 99-190, the PTO is reflecting a reduction of $8,000 in 1986 obligations for consulting services which is carried forward as an available unobligated balance in 1987.

Consulting services support is used to support the implementation of the Automation Master Plan. PTO's automation initiatives are designed to promote the goal of improved patent and trademark quality and to modernize the Office through effective and efficient automation systems.

Continued support for management and professional services is required to strengthen U.S. property rights in the world market, to maintain a working relationship with the patent and trademark associations, and to implement an effective and efficient automation system.

Available funds for special studies and analyses will be used to further develop strategic methodology for the automation of PTO program and management systems.

Patent and Trademark Office
Salaries and Expenses

PERIODICALS, PAMPHLETS AND AUDIOVISUAL PRODUCTS

(Obligations in thousands of dollars)

	1984 Actual	1985 Actual	1966 Estimate	1987 Estimate
Periodicals	$247	$69	$76	$83
Pamphlets	108	35	50	47
Audiovisuals	1	2	2	3
Total	$356	$106	$128	$133

Narrative Statement

Technical literature documents in the form of periodicals and pamphlets are essential in the patent and trademark examination process. The requirement for technical literature documents is directly proportional to the workload and resultant production in patent and trademark examination activities. The use of audiovisuals is primarily for PTO's National Inventors Day program.

- In 1985, we reached the trademark pendency goal of three months to first action and 13 months to registration; and

- In 1986 we will continue to refine our Automated Trademark System and plan to complete the installation of the Automated Patent System in Group 220 where we will test our electronic patent searching and examining concepts.

FY 1987 REQUEST

The 1987 program level request for the Patent and Trademark Office is $243,444,000 and 3,401 positions, an increase of $16,297,000 and a decrease of 7 positions in program changes from the 1987 base. The base includes net increases of $6,968,000 to offset price increases and other mandatory adjustments, such as the restoration of the proposed 5% pay cut at $4,745,000, to the 1986 appropriated level of $220,179,000. With projected offsetting user fee receipts and utilization of funds from the prior year, the 1987 budget authority requested is 45 percent of our operating costs, or $109,632,000. This is a net increase of $24,932,000 when compared to the 1986 appropriation level, however, the largest portion of this increase ($15,993,000) is the restoration of budget authority from the one-time application of accumulated excess fees as an offset to the 1986 budget authority level.

Our budget request for 1987 proposes funding adjustments for our three major programs.

- For the patent pendency reduction programs, we request an increase of $932,000. This funding will allow us to replace critical patent examiners lost to attritions, to promote our less senior examiners as their productivity warrants, and to improve the support services for the examining corps, i.e., mail processing, microfilming, Patent copying, and printing services. Increased staff and funds are needed to keep the Board of Patent Appeals and Interferences in pace with the growing numbers of appeals generated by the enlarged examining corps. In addition, funds are needed to prepare examiner work sites for the expanded Automated Patent System. There is a net decrease of 48 positions in patent pendency reduction programs in this budget proposal.

  The 1987 budget proposes to relinquish 57 professional examiner positions which reflects the orderly phase down from our massive backlog reduction effort to steady state production. By the end of FY 1986, average pendency time will be 21.1 months. The resources we request for 1987 will allow us to dispose of 130,000 applications and continue to reduce average pendency time towards our 18 months goal.

- For Trademarks, we request an increase of 9 positions and $738,000. The increased resources will permit us to maintain the 3/13 pendency level, augment the Trademark Trial and Appeal Board, maintain the "paper" trademark public search room, and enhance the automated trademark data base, operational since 1985.

- FOR OUR AUTOMATION PROGRAM, WE REQUEST AN INCREASE OF 32 POSITIONS AND $14,627,000. THE 1987 AUTOMATION FUNDING AND STAFFING CHANGES ARE REFLECTED IN THE REVISED AUTOMATION MASTER PLAN THAT WAS DISTRIBUTED TO THE CONGRESS, USER GROUPS AND INDUSTRY LAST MONTH. THE REQUESTED INCREASE WILL PROVIDE FOR THE EXTENDED TESTING AND EVALUATION OF THE AUTOMATED PATENT SYSTEM, THE DEPLOYMENT OF APPROVED FUNCTIONAL CAPABILITIES TO OTHER PATENT EXAMINING GROUPS, THE REPLACEMENT OF OUR CURRENT COMPUTER SYSTEMS, AND THE INTEGRATION OF THE EXISTING AUTOMATED TRADEMARK SEARCHING AND MONITORING SYSTEMS. THE INCREASED POSITIONS ARE NEEDED TO AUGMENT OUR STAFF IN SYSTEMS ENGINEERING AND IN DATA BASE MANAGEMENT.

CONCLUSION

ON OCTOBER 5, 1985, STATUTORY PATENT FEES WERE INCREASED BY 11.7% REFLECTING THE CHANGES TO THE CONSUMER PRICE INDEX OVER THE PAST THREE YEARS AS PERMITTED BY SECTION 41(F) OF TITLE 35 OF THE UNITED STATES CODE. PATENT SERVICE FEES WERE ADJUSTED TO RECOVER THE FULL ESTIMATED COSTS OF PROVIDING THESE SERVICES FOR THE 1986-1988 CYCLE. TRADEMARK FEES WILL BE SET ON OCTOBER 1 OF THIS YEAR TO RECOVER THE FULL PROJECTED COSTS OF PROCESSING TRADEMARKS. GIVEN THIS COMBINATION OF USER FEES AND TAXPAYER SUPPORT, WE ARE CONFIDENT THE PTO WILL CONTINUE TO IMPROVE THE TIMELINESS, QUALITY, AND RELIABILITY OF ITS PRODUCTS AND SERVICES.

MR. CHAIRMAN, THIS CONCLUDES MY STATEMENT. I WILL BE PLEASED TO RESPOND TO ANY QUESTIONS YOU MAY HAVE.

Mr. DWYER. Thank you, Mr. Quigg.

GRAMM-RUDMAN-HOLLINGS

You had $3,642,000 sequestered as a result of Gramm-Rudman. And how are you managing?

Mr. QUIGG. We are going to curtail overtime in the patent examining area for a six-month period. We are also going to defer the capture of our backfile, the drawings of patents in our files back from the present time back in the system, and also the text of those patents from 1970 back. The patents from 1970 to the present time are on magnetic tape already, so that's the difference.

Mr. DWYER. Any RIF's or furloughs?

Mr. QUIGG. No.

Mr. DWYER. Well, this lack of overtime and so on, will this affect your goals for reaching the patent pendency of 18 months by 1987 and your trademark application pendency goal of 13 months by 1987?

Mr. QUIGG. It will have no effect on the trademark—well, trademarks will slip slightly this year but will come back into the 3/13 phase next year. As far as the patents are concerned, we will slip slightly on the 1987 goal for reaching the 18 months but we will be pushing as strong as we can without cutting back on our automation, which is the big item as far as giving us quality of our product.

Mr. DWYER. I'm going to run down and vote. I'll be right back.

Mr. QUIGG. All right, sir.

[Recess.]

Mr. QUIGG. Mr. Chairman, if I might expand a little bit on your question with respect to the $3.64 million sequestration.

Actually, we lost $8.78 million from the sequestration; $5.138 million was from fees that had been paid in by users.

Also, when I said that we were trying to balance the production and the quality, that reprogramming is before OMB, so we still have to get that approval.

Mr. DWYER. The proposed deferral for fiscal year 1986 into 1987—do you want to discuss that for a moment?

DEFERRALS

Mr. QUIGG. This was the prior year unobligated balance. Because of the high productivity of the corps of examiners that we had employed, we had decided not to employ 25 new examiners and to utilize overtime in that connection in order to get the utmost production.

Mr. LYNCH. Basically, what we are doing is in 1985 we expected to fill 200 positions. We only filled 175. The annualized salaries from those 25 unfilled positions will not be required in 1986; we will bring that forward in 1987. In addition, we plan to acquire some computer space. That building has been delayed, and that will result in some savings which we will also bring forward into 1987. This deferral is not fees; it is not surplus fees. It is unobligated balances.

Mr. DWYER. What was the amount of that deferral?

Mr. LYNCH. It is $1,977,000.

Mr. **Dwyer**. There was a deferral in 1985 of over $15 million.

Mr. **Lynch**. That's correct.

Mr. **Dwyer**. What was that related to?

Mr. **Lynch**. Those were all surplus fee collections, collections in excess of budget.

Mr. **Dwyer**. Okay.

AUTHORIZATION LEGISLATION

What's the status of your authorization for fiscal year 1987?

Mr. **Quigg**. The House bill has been passed. The Senate bill has been passed by the committee. It does differ somewhat from the House version, and depending upon the disposition by the full Senate I expect it will go to conference committee.

Mr. **Dwyer**. What use of receipts generated by fees are you contemplating that might be in conflict with either of these two authorization bills?

Mr. **Quigg**. I don't contemplate using fees that would be in conflict with them. We would use those fees strictly in accordance with the final bill that comes out.

Mr. **Dwyer**. Will that have an effect on the appropriated amount?

Mr. **Quigg**. If the House bill is the one which is finally adopted, this will have a substantial effect on our operation because that bill prevents us from utilizing fees in the automation program. This would slow down the program tremendously. It would have a drastic effect in slowing down our ability to improve the quality of the product that we are putting out.

Mr. **Dwyer**. The assumption of the fees in your 1987 budget, is that in keeping with whose bill, now? You have to make certain assumptions with the bill before us.

Mr. **Quigg**. We have assumed the Senate bill approach.

Mr. **Dwyer**. Are you at serious odds with the authorizing committee over your overall program and goals and targets?

Mr. **Quigg**. I don't think that we are at odds as far as the targets are concerned. As I said, the House bill—which would not permit us to use fees for automation—is, I think, about the only place where we would be at odds with one of those bills. The Senate bill would permit us to utilize those fees, and we would be able to maintain the momentum of our automation program.

Mr. **Dwyer**. How about the dollar difference? Will there be a dollar difference in what you just spoke to?

Mr. **Lynch**. I don't have the figure right now, but we can supply it for the record. There would be a difference.

Mr. **Dwyer**. Supply it for the record, then. Would you supply it for the record?

Mr. **Lynch**. Yes.

[The information follows:]

User Fees

If the Office is prohibited from using fees to fund noncompensation automation activities in 1986, 1987 and 1988, as section 5 of H.R. 2434 directs, the alternatives are:

For patents:

(1) Additional funds to cover the difference between the estimated automation requirements and the budget authority requested by the President could be appropriated, or

(2) If additional funds were not appropriated, non-restricted automation resources available over the next three years would be used to (1) maintain current systems and (2) continue development of a search and retrieval system, but at a much slower rate than originally planned. The extent of this development work would be contingent upon available resources after taking into consideration the cost of maintaining current systems and the contractural costs that will have to be incurred because of the slowdown and possible terminations.

For trademarks:

(1) Funds to cover both direct and indirect costs of trademark automation could be appropriated; or

(2) If funds were not appropriated, all trademark automation programs would be terminated. While we have not developed firm estimates of the additional costs to be incurred if the trademark automation program were terminated, additional costs would likely be incurred for terminating existing contracts and implementing or retaining manual systems to replace current and planned automated systems, both of which are totally funded by user fees.

Given the above scenarios, if the user fee restrictions contained in H.R. 2434 are enacted, the PTO would require an additional $16.4 million in budget authority in 1986 to carry out the program contained in the fiscal year 1986 budget submission. Based upon the cost estimates contained in the original Automation Master Plan, (issued in 1982) over the three year fee cycle—1986 through 1988—the total additional budget authority required would be approximately $66 million. Based upon the cost estimates contained in the revised Automation Master Plan issued in February, 1986, the total additional budget authority required would be approximately $75.4 million.

AUTOMATION

Mr. DWYER. Once you have achieved your overall targets of patent pendency and trademark pendency, what is your automation budget expected to be?

Mr. LYNCH. Are you talking about in this fiscal year, or——

Mr. DWYER. Well, yes. In 1987 you're looking for an increase of over $5 million for a total automation budget of $20,757,000, I think it is. And you're doing this to achieve certain targets. Now, once you achieve those certain targets, what do you expect your budget to be annually?

Mr. QUIGG. The budget for automation this year is $55.9 million. I believe it tops out at about $84 million.

USER FEES

Mr. DWYER. You are proposing to generate $12,341,000 more in fees in 1987 than in 1986. Is this the result of increased fees or greater volume?

Mr. QUIGG. Well, it's a combination of several things. First, we raised the fees in October of 1985. Secondly, our filings have increased a substantial amount, to 122,000 applications a year. And third, maintenance fees are beginning to come into effect. So all three of those go into that particular sum.

Mr. DWYER. Just, I guess, a general philosophical question. You're one of the few agencies that's authorized to utilize their fees rather than return them to the general Treasury. You're utilizing $132,000,000 without any authorizing legislation and virtually no constraints in terms of appropriations for use of these funds. How do you justify this?

Mr. QUIGG. Well, I would say that we try to advise the Congress rather often as to exactly what we expect to do with the funds. The fees are included in the budget, which is considered by the committees each year, and it seems to me that, together with some rather complete surveillance of our operation by the Department of Commerce, does not leave us running around loose with a lot of money.

Mr. DWYER. All right. Thank you, Mr. Quigg. We'll have some more questions for the record if you will supply us with the answers?

Mr. QUIGG. Yes, sir.

[Questions for the record follow:]

QUESTIONS FOR THE RECORD BY CONGRESSMAN SMITH

Automation

QUESTION:

Specify how automating the patent process by 1990 will reduce patent pendency and improve patent quality. (See page PTO-19 of budget estimates.)

ANSWER:

Except for the long-range, potentially small time savings that could result from the electronic file wrapper and photocomposition subsystems, automating the patent process by 1990 will not reduce the patent pendency period. The principal objective of automation will improve the integrity and quality of the search files by eliminating the problems of missing, misfiled and late documents. Corollary improvements are to incorporate all appropriate foreign patents on a timely, systematic, usable basis and to provide supplementary search tools - indexes and techniques - to improve search effectiveness and efficiency. Improvements will result in more thorough searches and examinations and thereby contribute to higher quality patent grants.

QUESTION:

a. Is automation by 1990 a goal or a method of attaining the pendency and quality goals?

ANSWER:

Automating the patent examining process will not reduce patent pendency, but will help to attain the goal of improved patent quality as defined above. The development and deployment of these automated systems has been established as one of the highest priority goals of the USPTO and one of the major goals of the Secretary of Commerce. The automation goal complements the goal of improved patent quality.

QUESTION:

b. How has automation to date contributed to the pendency and quality improvements?

ANSWER:

Automating the patent examining process will not reduce patent pendency. At this time automation of the Patent Process is approaching the testbed phase in Patent Examining Group 220, which is scheduled to begin on July 1. Quality improvements will not be noticeable until after deployment to the remaining examining groups.

QUESTION:

What quantifiable measures of quality is PTO using and/or tracking to ensure that automation is improving patent quality? (See PTO-23)

ANSWER:

The impact of automation on patent quality is part of an overall effort to test and evaluate system components individually and as a whole. The Office has prepared a draft "Master Test and Evaluation Plan" which covers all implementations and capabilities which will ultimately be deployed. It focuses on those capabilities, e.g., text and classified image searching, which will be deployed first. In March 1986, this draft plan was given to the Department of Commerce, the Institute of Computer Sciences and Technology of the National Bureau of Standards, and to users of the patent system such as the American Intellectual Property Law Association (AIPLA) Subcommittee on the Group 220 Test Evaluation. This subcommittee was formed from their Information Retrieval Committee. The PTO will work closely with this subcommittee in planning the APS test and evaluation process.

QUESTION:

Is Automation of Trademark processes by 1990 a goal or a method of attaining other goals? (See PTO-29)

ANSWER:

The development and deployment of these automated systems has been established as one of the highest priority goals of the USPTO and one of the major goals of the Secretary of Commerce. The automation goal complements the goal of improved trademark quality.

QUESTION:

Regarding PTO's plans "...to improve the quality of examination through increased funds for making corrections to the trademark data base..." (see PTO-31, 33), how did these errors get into the trademark data base?

ANSWER:

The increased funds for making corrections to the trademark data base relate to text editing requirements necessitated during the normal processing of new trademark applications during the examination process. Generally, the corrections made during this process are due to amendments made to data in the application by the applicant. Occasionally, errors may be keyed into the data base when the data is initially captured from the new application but this is rare.

QUESTION:

Were any trademark data base errors introduced during the data capture efforts of the data base exchange agreement partners? How many?

ANSWER:

The data base exchange partners have been involved with three different phases of the data capture effort in Trademarks. CompuMark (CM) was responsible for the capture of text data pertaining to trademarks registered prior to January 1, 1980, and assignment data recorded prior to January 1, 1985. No assignment data has been delivered to the PTO as of this date and no error analysis has been done on that data. There were errors in the registration data delivered to the PTO and the PTO and CM have engaged in a joint clean-up effort of eight specified fields to improve the quality of the records keyed. PTO and CM each verified one-half of the records keyed by CM, and any field found to be in error was corrected. At the present time, the quality of any given field in these records range from approximately 42% correct to 100% correct according to a recent study released by the Office of Automation with most fields considered critical to conducting a high quality search of the records at approximately 99% correct.

Thomson and Thomson (T&T) was responsible for capture of image data associated with approximately 40% of registered trademarks. Many of the "errors" associated with digitized image data do not have to do with the quality of the image, but with inaccurate indexing of image data records to the application/registration record serial or registration number. Other problems were encountered when the PTO delivered cancelled registration information to T&T, and their subcontractor did not realize that they were not to capture information from certificates which were stamped cancelled. These errors are currently being resolved in a joint effort between T&T and the PTO.

Thomson and Thomson is also responsible for capture of data from newly filed applications. This data is the subject of an ongoing quality review effort in the PTO and all indications are that the quality of this keyed data is high. Any needed corrections to this data are made during the examination process using PTO resources.

QUESTION:

b. Who is incurring the cost of corrections?

ANSWER:

As stated in the previous response, some of the cost of corrections is being shared by the PTO and its exchange partners and some of the work is being done by the PTO. A project completed in the Summer of 1984 is an example of a joint clean-up effort between the PTO and CM, and the current design project is a joint effort between T&T and the PTO. The PTO is completing other clean-up efforts inhouse using government personnel for verification of records and has completed some efforts utilizing computers to identify and correct logical inconsistencies in records.

QUESTION:

c. What quality control procedures were followed?

ANSWER:

Because of time pressures, an initial attempt to quality control the CM delivered registration data prior to loading into the PTO computers was not accomplished. No review has been done on the assignment data because the only data which has been delivered to the PTO consisted of 60-70 records to allow the PTO to check tape formats and the nature of the information being keyed by CM from the assignment records. Application data keyed by T&T is quality controlled by the Office of Automation on a random sample basis, and tapes below standard are returned to T&T for correction. Five percent of the applications are sampled. The image data digitized by T&T was quality controlled as it was loaded into PTO computers and data not meeting standards has been returned for redigitizing. The indexing problem was not discovered until after data had been loaded into PTO computers.

QUESTION:

d. How have the values of the exchanges been adjusted to account for any additional costs to PTO for correcting errors introduced by exchange agreement partners?

ANSWER:

On December 6, 1985 the PTO published in the Federal Register its "Policy and Plans Regarding Exchange Agreements Entered Into by the Patent and Trademark Office to Competitive Procurement Contracts." Any adjustment of the values of the exchanges has thus become a "moot issue", as we intend to convert them all to procurement contracts.

QUESTION:

What actions has PTO taken to remove restrictions on the public use of data bases obtained by exchange agreements? Is PTO planning to remove all restrictions? What results has PTO achieved? (See PTO-33)

ANSWER:

Commissioner Donald J. Quigg stated before the Subcommittee on Government Information, Justice, and Agriculture on October 18, 1985 that:

> "To address these concerns, we are prepared to terminate the exchange agreements and have already initiated action to buy the electronic data bases through conventional procurement techniques. Policy guidance on how we are to proceed is being provided to us by the Deputy Secretary of Commerce."

We plan to dispose of these exchange agreements and to remove restrictions on public use. A plan was provided to the Senate Committee on the Judiciary in January of this year. The dates are subject to change.

Name	Planned Disposition	Date
Thomson and Thomson	Procurement	RFP-3/86
Derwent	Procurement	RFP-4/86
Mead Data Central	Procurement	RFP-3/86
Research Publications, Inc.	Terminate	9/86
Compu-Mark, U.S.	Sole Source	pending
Pergamon Infoline	Terminate	9/86

QUESTION:

When does PTO plan to discontinue its manual public search room? (See PTO-41)

ANSWER:

The paper files will be retained until the automated system has been fully tested and evaluated and, in addition, until a public hearing has been held.

QUESTION:

a. What criteria will PTO use to judge that the manual search facility should be replaced by its automated system?

ANSWER:

Once the automated system has been judged to be "equal to or better than" the manual paper system, the criteria established by the PTO will be supplied to the public and a public hearing will be held to determine when the automated system will fully replace the paper system.

QUESTION:

b. Will there be any public involvement in the decision to discontinue the manual search facility?

ANSWER:

Yes. Once the automated system has been fully tested and evaluated and found to be "equal to or better than" the paper system, a public hearing will be held to get user input to the decision as to when to discontinue the manual search facility.

QUESTION:

Does PTO plan to charge a fee for access to its automated search system? What cost will such a fee cover, if used? (See PTO-71)

ANSWER:

Section 4 of the authorization bill as passed by the House and reported by the Senate Committee on the Judiciary (H.R. 2434) precludes us from charging fees for use of the search rooms. The costs of the search rooms will come from amounts appropriated by Congress. The approach is fraught with uncertainties as to budget needs since volume of usage cannot be accurately predicted. Support by fees would provide the income to meet user needs.

QUESTION:

What is PTO currently doing to monitor its automated patent system contractors and how does PTO plan to use the 10 additional positions requested in Fiscal Year 1987? (See PTO-53)

ANSWER:

The 10 additional positions requested in FY 1987 are for Automated Patent System (APS) operations support. As stated in the revised Automation Master Plan, when APS moves to its new computer site, the PTO will contract out operation of the APS computer system. However, the PTO will provide staff to supervise the operations, support scheduling and the tape library, support production and quality control, support the APS network and site equipment and to monitor contracts.

Currently the PTO is using its resources to monitor and evaluate technical requirements, for test and evaluation, and to monitor cost. The PTO is also using contractors to monitor the APS contractors:

° Federal Simulation Center/General Service Administration (FEDSIM) will:
  - design, develop and validate a model of APS with workload data from the testbed operation, and
  - use a simulation model to predict whether the system will support performance requirements.

° Institute for Computer Science and Technology/National Bureau of Standards (ICST) will assist PTO in:
  - critical design reviews, and
  - test plans and
  - system performance evaluation plans.

° MITRE will assist in:
  - APS operational systems testing
  - analysis of workstation architectural alternatives,
  - data base administration,
  - APS use modeling, and
  - alternative equipment analyses

° JB Associates, IV & V (Independent Verification and Validation) will do:
  - software engineering planning,
  - testing and verification and validation,
  - software quality assurance, and
  - software configuration management.

° Future Competitive IV & V contractors will assist PTO to:
  - establish a Cost/Schedule Status Reporting (CSSR) system to report variances in the schedule and cost of the work breakdown structure of the APS's system integrator,
  - establish/execute quality assurance program for APS, and
  - establish and implement data management plan/procedures.

QUESTION:

Why did PTO decide to operate its new Automated Trademark System with in-house staff?

ANSWER:

The decision has not been made as to who will operate the system. The revised Automation Master Plan provides for contractor operations of all future systems. Specifically, the request for proposal (RFP) for the ATS will contain an option for contractor operations once the system has been developed. However, for budgeting purposes we have built in resources for in-house operations if our evaluation of the offers received should show that it is cost beneficial to operate ATS with government personnel.

Fees

QUESTION:

What would be the budgetary impact in fiscal 1986 and 1987 if PTO was not allowed to use fee funding to pay for its automation efforts? (See PTO-70-74, 77.)

ANSWER:

If PTO is prohibited from using fees to fund automation activities in 1986, 1987 and 1988, as section 5 of H.R. 2434 as passed by the House directs, the alternatives are:

For patents:

(1) Additional funds to cover the difference between the estimated automation requirements and the budget authority requested by the President could be appropriated in which event fee collections would exceed need, or

(2) If additional funds were not appropriated, non-restricted automation resources available over the next three years would be used to (1) maintain current systems and (2) continue development of a search and retrieval system, but at a much slower rate than originally planned. The extent of this development work would be contingent upon available resources after taking into consideration the cost of maintaining current systems and the contractual costs that will have to be incurred because of the slowdown and possible terminations.

For trademarks:

(1) Funds to cover both the direct and indirect costs of trademark automation could be appropriated; or
(2) If funds were not appropriated, all trademark automation programs would be terminated. While we have not developed firm estimates of the additional costs to be incurred if the trademark automation program were terminated, additional costs would likely be incurred for terminating existing contracts and implementing or retaining manual systems to replace current and planned automated systems, both of which are totally funded by user fees.

Given these alternatives, if the user fee restrictions contained in H.R. 2434 as passed by the House are enacted, the PTO would require an additional $16.4 million in Budget authority in 1986 to carry out the program contained in the fiscal year 1986 Budget submission. Based upon the cost estimates contained in the original Automation Master Plan (issued in 1982), over the three year fee cycle - 1986 through 1988 - the total additional Budget authority required would be approximately $66 million. Based upon the cost estimates contained in the revised Automation Master Plan issued in February 1986, the total additional Budget authority required would be approximately $75.4 million.

Patents

QUESTION:

How will the "18 months by 1987" (18/87) patent pendency goal impact the quality of issued patents?

a. How will PTO ensure that quality patents will still be issued given the demand to process them more quickly?

b. How will patent quality be improved, other than through the patent automation program?

ANSWER:

a. Quality has always been a high priority within the PTO and user groups. The quality of a patent is a measure of the likelihood that a court would or would not uphold the validity of the patent. A logical measure of quality is the presence of elements in the patent or its prosecution on which a court may base a decision of invalidity. During the entire pendency period reduction effort we maintained an independent 4% quality review sample of applications allowed by examiners. We have also sought and implemented new tools and techniques to maintain and improve quality. Examiner recruiting, performance ratings, and awards all rely heavily on quality-related considerations. Tools such as access to commercial data bases, examiner education, and the Manual of Patent Examining Procedure contribute to improvements in the quality of examiner searches and consistent application of standard examining procedures.

b. The major effort devoted to improving file integrity, and thereby patent quality in the long run, is the PTO's automation program.

In the interim, file integrity is being maintained through the existing reclassification program. Patent search files are reclassified by expanding the classification for new technologies and thereby subdividing the files.

Contractor personnel are responsible for expanding the files, filing new references, and refiling references that are removed from the search file during the course of patent examination. Quality control provisions encourage timely, accurate performance.

To further improve the quality element of patent examination, a comprehensive quality improvement program is operational. Major elements of this program (exclusive of automation) are:

1) Strengthen quality-related elements in performance plans and performance awards.
2) Stiffen quality standards for granting and retaining signatory authority of primary patent examiners.
3) Continue to increase the range of in-house examiner education programs and continue support for the Law School Tuition Assistance program.
4) Continue and promote the industry-funded Examiner Education Program that exposes examiners to current industrial technologies.
5) Lower pendency within the Board of Patent Appeals and Interferences and improve feedback to the Examining Corps.

6) Review and appropriate strengthening of specific potential problem areas in examining.

QUESTION:

Since the proposed budget requests 57 fewer patent examiners, how much additional overtime will be needed to achieve the 18/87 patent pendency goal?

ANSWER:

The 1987 Budget request contains $3.2 million for overtime, an increase of $100,000 over the 1986 Budget request (prior to Gramm-Rudman-Hollings). The reduction of 57 examiners represents the combination of examiner productivity improvements, elimination of backlogs, and a differing mix of grades than was contemplated for 1987 in earlier budget cycles. Since development of the 1987 President's Budget, we have been addressing the effects of Gramm-Rudman-Hollings as well as a further increase in application levels. We now expect to achieve the 18 months pendency period no later than 1989. As we near attainment of the 18 month pendency goal, our planning is aimed at maintaining pendency with minimum disruption to the Examining Corps and toward further improvements in patent quality.

QUESTION:

According to the budget request, patent pendency will be reduced in part due to the increased productivity of new examiners hired from 1982 to 1985.

a. Are you concerned that these less experienced examiners will issue lower quality patents?

b. Do the newer examiners generally have higher productivity than the more experienced examiners?

c. How has increased examiner productivity affected pendency and quality? (See PTO-21)

ANSWER:

a. Several measures are being taken to ensure that patents reviewed by the new examiners meet quality standards. We start with high recruiting standards for new examiners. These examiners then undergo a strong orientation program at the Patent Academy throughout their first year to train them in the latest examination methodologies. Most importantly, junior examiners' work performance is further controlled through supervisory review of every examiner action. As followup, the Examiner Education Program provides continued exposure to new techniques and technological advancement for all examiners. We also provide the Law School Tuition Assistance Program to build a sound background in patent law.

b. Productivity of newer examiners is higher than originally expected but significantly below that of the more experienced examiners. The grade structure of the Examining Corps is based in large part on productivity and quality. Higher graded examiners are, by definition, more productive than those at the entry level.

c. Increased examiner productivity has enabled us to stay on track with our pendency goal despite an increase in application levels at 116,000. It has also permitted us to hire fewer new examiners than we originally planned. Higher productivity also frees more resources for application to quality improvement tasks such as the long range automation program and the more immediate quality improvement programs such as education and commercial data base searches.

QUESTION:

How are the goals, "reduce patent pendency to 18 months by 1987 and improve patent quality," and "automate the patent and trademark processes by 1990" related to each other, if at all? (See PTO-19.) If a relationship exists, how does slippage of the automation program schedule adversely affect the 18/87 goal?

ANSWER:

There is no direct relationship between the patent pendency period reduction initiative and the effort to automate the patent and trademark functions by 1990 and there is no impact of automation schedule slippage on pendency period reduction. Pendency reduction is based on the phased augmentation of processing capacity to stem the growth and to reduce the backlog of pending cases. The principal component of this effort has been the recruitment and training of more than 800 new examiners between 1982 and 1985 and the hiring of additional clerical staff to support their efforts.

The automation effort is focused on improving the quality of patents at the earliest possible date by creating a data base with 100 percent file integrity and deploying sophisticated electronic search tools to aid the examiners in uncovering all possible relevant prior art in their searches.

QUESTION:

It appears as though attaining pendency of 18.9 months in 1987 assumes a decrease in applications from 1985 to 1986 and no change in the number of applications from 1986 to 1987. (See PTO-20.)

a. How can these assumptions be made, especially since the number of applications increased from 1984 to 1985?

b. What other assumptions is the 18.9 month 1987 pendency estimate based on?

c. Won't applications increase as pendency decreases?

ANSWER:

a. Planning assumptions contained in the 1987 Budget request were developed prior to the availability of 1985 actual data. We conservatively estimated that the 1985 level of approximately 116,000 applications would remain relatively steady in the outyears. Given some built-in flexibility in managing non-recurring fluctuations in applications, an average level of 116,000 applications appeared reasonable. Currently we project 121,000 applications in 1986. Given this recent increase in projected applications, the likelihood that high application levels will continue through 1987, and the effects of Gramm-Rudman-Hollings in 1986, we will be unable to achieve 18 month pendency in 1987.

b. The 18.9 month pendency in 1987 assumes no added pre-examination or post-examination backlogs. It assumes a specific number and grade mix of working examiners producing at levels consistent with recent historical productivity averages by grade and operating at a specific amount of overtime. Actual performance in 1986 (hires, attritions and productivity) as well as budgetary changes (Gramm-Rudman-Hollings) will act to alter our approach to achieving this goal.

c. We do not have any evidence that applicants decisions to file are influenced by the pendency period.

Trademarks

QUESTION:

Since the trademark fees reflect full cost recovery, will trademark owners be required to pay for both the manual and automated systems even though they are unable to use the automated system?

ANSWER:

Trademark fees are currently set to recover the costs associated with the registration of trademarks. Because most areas of the Trademark Operation are automated, the costs associated with the Automated Trademark System are a necessary cost of the registration process. As such, trademark fees are used to recover the costs associated with the automation of the process. Trademark owners, in fact, gain significant benefits from the present automated systems in the Trademark Cffice, although they cannot yet access the automated search system. One automated system presently available to the trademark owner, known as TRAM II, contains an extract of the essential information extracted from all active trademark applications and registrations, and also includes all status and location information. The information extracted from the application and registration is the same information found in the automated search system. These records can be accessed by any trademark owner or any other member of the public, free of charge in the Trademark Public Search Room. Additionally, TRAM II is used internally in the Trademark Office for all processing of applications and registrations and data from this system is used to create magnetic tapes which contain the data which will be used to publish the Trademark Official Gazette and print the trademark owner's registration certificate. Trademark owners are deriving many benefits from trademark automated systems even though they do not yet have access to the automated search system. Additionally, trademark owners will derive a direct benefit from the higher quality search which should be available through use of the automated search system by trademark examining attorneys.

Futhermore, section 4 of the PTO authorization bill passed by the House and favorably reported by the Senate Judiciary Committee prohibits the imposition of fees for the use of public search rooms and libraries. Section 5 of the authorization bill passed by the House goes one step further and prohibits the use of fees for any automation program. If section 5 of the House bill is enacted, automation would have to be funded from appropriations.

Patents

QUESTION:

By how much has the reexamination process decreased the number of patents that are litigated?

ANSWER:

The PTO does not analyze data on the numbers of patents under litigation. From public information, we do know that approximately twenty-five percent of reexamination filings are connected with patents already in litigation. We have also observed that the number of litigated cases settled out-of-court has increased but we cannot say whether this is a benefit of the reexamination program. In recent discussions with principals involved in reexamination cases and in a written survey conducted by the Patent Bar, the parties indicated a belief that the program did significantly impact the outcome of litigation. In general, the Patent Bar has been pleased with the reexamination program. The Bar survey referenced above indicated that an overwhelming majority of the Bar believed reexamination is worthwhile.

Trademarks

QUESTION:

How much money has PTO saved by bringing the Trademark Official Gazette photocomposition project in-house?

ANSWER:

The net savings to the PTO as a result of bringing the Trademark Official Gazette photocomposition project in-house have been identified in the revised Automation Master Plan. Savings in printing costs are due to the termination of the key entry contract. This level of savings is offset in part by the need to acquire contractor services for text-editing and proofreading services. Net savings of about $252,000 are expected to be realized starting in fiscal year 1988. The net savings are estimated to grow at an annual rate of about 3.5 percent thereafter.

Gramm-Rudman-Hollings

QUESTION:

For the current and next fiscal years, what specific PTO programs, projects and activities will be cut or eliminated to meet the reductions required by The Balanced Budget and Emergency Deficit Reduction Act of 1985 (P.L. 99-177, Gramm-Rudman-Hollings)?

ANSWER:

No programs will be eliminated nor will any long range objectives become impossible because of the 1986 Gramm-Rudman-Hollings constraints. Our ambitious schedules, however, will need to be revised.

If the GRH reductions were spread uniformly against all budget line items, the major effects would be:

- ° The PTO programs supporting the patent pendency period reduction goal would be reduced by $4.7 million. Further complicating the reduction in funding is an increase in workload: the numbers of patent applications to be reviewed in 1986 will total 121,000. This is an increase of 5,000 applications above the planned and budgeted workload of 116,000 applications. The net effect of these two actions results in a steady state pendency rate of more than 20 months in 1987.
- ° The Automation programs would receive a $1.6 million reduction under GRH. Strictly applied, the results would be a three to six month delay in the implementation of the Automated Patent System (APS) testbed in Patent Examining Group 220; a three month delay in both the patent backfile data base conversion and the APS deployment schedule; a six month delay in improvements to the trademark data base; a six month delay in replacing the current systems mainframe; and a three month postponement in initiating the integrated Automated Trademark System (ATS).
- ° Programs supportive of patent quality would have suffered also. Unfilled Examiner-in-Chief vacancies in the Board of Patent Appeals and Interferences would result in a higher case backlog. The Quality Review sample of allowed patent cases would fall from 4.0 percent to 3.6 percent. Patent examiner access to automated and paper search references would be reduced.

QUESTION:

a. Will the reductions result in PTO not effectively carrying out any basic agency mission?

ANSWER:

No. The across the board Gramm-Rudman-Hollings reductions would not preclude the PTO from meeting its statutory mission to issue patents and to register marks.

QUESTION:

b. Which of the programs, projects and activities being reduced will cause the greatest negative impact on PTO's operations? What economies taken will reduce the adverse impact? Can we expect reprogramming of funds in this effort?

ANSWER:

The programs most adversely affected by the GRH reductions are those contributing directly to reducing patent pendency and to maintaining the current levels of quality in the examination of new cases. The new Budget constraints imposed by Public Law 99-177 preclude the PTO from maintaining present standards of quality in examination. Further complicating the reduction in funding is the growth in patent applications from 116,000 to 121,000. The goal to reduce the patent pendency period to 18 months by 1987 is delayed.

Yes, the PTO has proposed a reprogramming. The economies we will implement if our proposed reprogramming is approved are as follows:

- ° Printing fewer patents and lowered printing costs allow the reprogramming of patent printing funds to the examination functions. Additional fee revenues expected from the growth in patent applications from 116,000 to 121,000 will be applied to the patent pendency reduction program.

- ° Lower than anticipated rental charges for space occupied in the PTO's Washington, D.C. site restores funds to the patent quality programs or functions of commercial data base searching and Scientific Library references, the Board of Patent Appeals and Interferences, and Quality Review.

In addition, Trademark examination funds will be used to restore the funding of the Trademark Trial and Appeal Board. The automation reductions will be concentrated in the patent data base capture contract. The APS testbed in Group 220 will be undertaken on schedule.

QUESTION:

c. Have you identified high-priority activities which PTO will try to insulate from the mandated cuts? If yes, list these priorities and activities.

ANSWER:

Yes. The overall priorities of this reprogramming action are:

- ° Maintain the patent pendency goal of 18 months but delay its achievement;
- ° Minimize the effects of the GRH cuts on patent quality: for the immediate future, in on-line commercial searches, reference tools, Board of Patent Appeals and Interferences, and Quality Review; for the long run, in automation.
- ° Maintain an expeditious notice of the trademark first action to promote commercial use of a mark. Temporarily extend the notice of registration by one month, in 1986 only.

QUESTION:

d. How many full-time employees must PTO lose to meet reduction targets?

ANSWER:

The PTO will not lose any full-time employees to meet the funding restrictions of Public Law 99-177. The majority of our savings will be implemented by curtailing the use of overtime and contractual obligations for printing, space and data base capture.

QUESTION:

e. What is the potential for furloughing PTO employees during FY 1986 and FY 1987? How many furlough days are expected per employee?

ANSWER:

The need to furlough our workforce at any time in order to address the $8.8 million Gramm-Rudman-Hollings reduction to our 1986 Budget is unnecessary and has not been considered a viable alternative in meeting our program needs. The proposed 1987 Budget request now pending before the Congress does not propose furloughs of employees.

Administration

QUESTION:

What is the total amount PTO plans to spend on outside contractual services (object class 25) in FY 1987?

a. Of this, how much will be procurred non-competitively? Please provide a listing and detailed explanation for each non-competitive contract.

b. How much of the contracting expenditures will be on consultants? List these contracts for the record.

c. In compliance with the provision in the P.L. 99-190 continuing resolution, did you take a 10 percent cut in consulting services? What contracts were reduced and by what amounts?

ANSWER:

PTO plans to spend $55,776,000 for outside contractual services in FY 1987. The largest portion is for Automation contracts ($46,361,000).

a. Of the $55,776,000 estimated in 1987 for outside contractual services, the following major contracts/subcontracts are expected to be procured on a non-competitive basis:

Description	Amount
1. MITRE Corporation, a not-for-profit organization which has provided system engineering support for the Automated Patent System (APS) since 1981, will furnish assistance during FY 1987 primarily in the areas of APS test and evaluation: a) evaluation planning; b) analysis of data needs, sources and quality; c) analysis of examiner activities; d) development of implementation specific evaluation plans. Maintaining the MITRE contract will allow the PTO to forego an expensive and time consuming learning curve required of an alternative contractor unfamiliar with the APS system.	$1,300,000
2. Compu-Mark Cooperative Agreement Buy-Out. In 1983, PTO signed an exchange agreement with Compu-Mark to convert the retrospective (paper) trademark data base to a digitized form. On 12/84, a Commerce Business Daily (CBD) notice on the PTO intent to enter a sole source contract for a buy-out was published. The only respondent was Compu-Mark. We anticipate this amount of residual expenditure in 1987.	260,000

3. Automated Patent System (APS) contract. This large-scale contract was competitively awarded in April 1984 to Planning Research Corporation (PRC) as the prime contractor in partnership with Chemical Abstracts Services (CAS). PRC acts as the systems integration contractor for the APS. The General Services Administration (GSA) delegated procurement authority through the Department of Commerce to PRC which acts as the procurement agent for the APS contract. Under this arrangement, three subcontracts were awarded on a non-competitive basis following Federal procurement regulations:

A.	Intecom. Provides an Integrated Business Exchange (IBX) switch to control the flow of communications along the Local Area Network (LAN) between the APS mainframe and the user workstations. Only known source. CBD notice on intent to procure non-competitively was issued on 8/9/84. Award was on 9/27/85.	[$2,800,000]
B.	MVS operating system software. Controls access by multiple systems to APS mainframe computer. Supports applications software design firm. Only IBM has license. On GSA schedule. CBD synopsis was issued on 11/24/84. Award was on 2/4/85.	[$294,000]
C.	ADABASE. Data base management system software. Provides "shell" or structure for application software. Used by APS software design firm in modifying firm's existing software programs to meet APS needs. CBD synopis was issued on 12/6/84. Award was on 2/6/85.	[$56,000]
Total, Non-competitive contracts		$1,560,000
[Total, Non-competitive subcontracts awarded within a competitive contract]		[$3,150,000]

b. About $84,000 is planned for consulting and related services. A total of approximately $74,000 is used to support implementation of the Automation Master Plan. These funds for consulting services, management and professional services, and special studies and analyses will be used to help implement an effective and efficient automation system. The remaining $10,000 is planned for various arbitrators used during employee union proceedings with the Patent Office Professional Association (POPA) and the National Treasury Employee Union (NTEU) Locals 243 and 245 to settle disputes over performance appraisal standards, performance evaluations for signature authority, effect of employee learning curves on performance expectations, and employee relocations into different technologies.

c. Yes, a 10 percent cut was taken. $8,000 was withheld from obligations for consulting services relating to automation.

QUESTIONS FOR THE RECORD BY CONGRESSMAN DWYER

Adjustments to Base

QUESTION:

Discuss your rental payment increases of $638,000 to GSA. Is this based upon the cost of the private space you are occupying?

ANSWER:

The $638,000 increase in 1987 rental payments to GSA represents the additional funds needed above the 1986 budgeted amount of $16,514,000 to pay the full year cost, in 1987, of space occupied by the PTO. (The total additional funds needed in 1987 actually amounts to $664,000. A program increase of $26,000 was requested for the difference.)

In 1986, an additional 129,000 square feet of space is being acquired for automation programs and consolidation of existing programs. (59,000 square feet of existing space will be released as contractual lease obligations are fulfilled.) This will result in a net increase of 70,000 square feet. The full-year (1987) cost of the additional 70,000 square feet in combination with the cost of maintaining existing PTO space until it is released is $664,000 greater than the $16,514,000 budgeted for 1986, or $17,178,000 for 1987.

With the exception of the Herbert C. Hoover Building, which is government owned, all PTO space is rented from a private contractor. A breakdown of the 1987 space rental costs by building is presented below:

	1987 Square Feet	1987 Cost ($000)
Hoover Building	55,534	1,089
Crystal Plaza 1	2,000	39
Crystal Plaza 2	153,550	2,799
Crystal Plaza 3-4	371,036	6,703
Crystal Plaza 6	23,385	421
Crystal Mall 1	18,330	491
Crystal Mall 2-3-4	39,800	717
Crystal Square 4	18,220	180
Crystal Gateway 2	25,255	535
Crystal Park 1	47,463	1,224
Crystal Park 2	87,826	2,612
Eads St. Warehouse	29,630	139
Fern St. Warehouse	14,715	94
Fullerton Center Warehouse	26,000	135
	912,744	$17,178

QUESTION:

You are requesting that postal rates will increase by 9.5 percent and that the justifications state that the $110,000 increase is computed on the 1986 estimate of $1,154,000. Does this increase relate to volume of mail or does it relate to an increase in the postal rate?

ANSWER:

The $110,000 requested relates to an increase in the postal rate. The new rates implemented on February 17, 1985 by the Postal Service resulted in an average increased cost of 9.5 percent. The increase is not requested for increased volumes of mail.

Patents

QUESTIONS:

You are requesting an increase of $9,742,000 related to professional patent examination, the Budget shows a decrease of 57 permanent positions. What is the increase related to?

ANSWER:

The increase of $9,742,000 in the Examination-Professional line item is the net of a decrease of $484,000 related to the reduction of 57 permanent examiner positions and an increase of $10,226,000 for automation and automation-related items. (The detail of these changes is contained on pages PTO-21 through PTO-23 of our 1987 budget submission.) In summary, the automation-related changes are: a net decrease of $312,000 for commercial data base access (a savings resulting from in-house automation); an increase of $891,000 for environmental conditioning of examiner work space, in preparation for deployment of the Automated Patent System (APS); and an increase of $9,647,000 to continue implementation of the Automation Master Plan.

Automation

QUESTION:

The automation master plan was set up three years ago. Each year you have deviated slightly from that. Please outline for us what your plans are for 1987.

ANSWER:

The following is the schedule of major Automation events for FY 1987 as outlined in the revised Automation Master Plan transmitted to the Subcommittee in February, 1986:

Automated Patent System(APS)/Data Base Automation (DIOS)	Time Frame
Complete evaluation of APS capabilities to support patent searches and evaluate the effect of electronic searching on examiner performance.	1st QTR. 1987
Complete evaluation of office automation features using local area network (LAN) compatible terminals and APS workstations.	2nd QTR. 1987
Complete loading Group 220 data from the Japanese and European Patent Offices into the in-house electronic data base.	1st QTR. 1987

Begin deployment of APS text searching	1st QTR. 1987
Complete quality and productivity evaluation of APS search methods and techniques	3rd QTR. 1987
Begin evaluation of Pilot Public Search Room - practicality and usefulness of all-electronic searches by the public	2nd QTR. 1987
Begin ongoing DIOS data capture	4th QTR. 1987
Begin APS photocomposition coding	4th QTR. 1987

Automated Trademark System (ATS)

Acquire and install Automated Trademark System for integrating TRAM/T-Search	1st QTR. 1987
Provide full registration page images by ATS	1st QTR. 1987
Develop and install adversary proceedings index, assignment processing data base, applicant and registrant index.	2nd QTR. 1987

Current Systems - ADP Support

Procure and install replacement system for current mainframe (Burrough's B7700's).	1st QTR. 1987
Acquire contractor services for APS operations	3rd QTR. 1987

QUESTION:

Please discuss what changes you have made in 1986 from the plan you submitted for 1986 in the hearing we held last March.

ANSWER:

Schedule changes for FY 1986 follow. (For additional detail, please reference pages 68-71 of the PTO 1987 Budget Request to the Congress.)

APS/DIOS	FY 1986 Schedule	Current Schedule	Comments
Install Group 220 Local Area Network (LAN)	1st QTR. 1986	1st QTR. 1986	On schedule
Install APS workstations Group 220 testbed	1st QTR. 1986	3rd QTR. 1986	Slippage due to industry requests for additional time to develop technical proposals.

APS/DIOS	FY 1986 Schedule	Current Schedule	Comments
Begin Group 220 image search software studies	1st QTR. 1986	2nd QTR. 1986	Now included in "Begin and end Full Text search system evaluation" to start 2nd QTR. 1986.
Acquire Stage 2 computer site	1st QTR. 1986	3rd QTR. 1986	Site and office space colocated lease to be signed.
		4th QTR. 1986	Office occupancy
		2nd QTR. 1987	Site occupancy.
Begin ongoing DIOS data capture	2nd QTR. 1986	4th QTR. 1987	Rescheduled to align data base delivery with extended Group 220 testbed.
Initiate electronic file wrapper (EFW) capability for Group 220	3rd QTR. 1986	3rd QTR. 1989	Rescheduled due to highest priority being placed on systems and functions that achieve quality.
Begin photocomposition software evaluation	4th QTR. 1986	1st QTR. 1988	Rescheduled due to highest priority being placed on systems and functions that achieve quality.
Initiate chemical structure search	4th QTR. 1986	1st QTR. 1987	Included under text searching ability to start 1st QTR. 1987.

QUESTION:

Please detail for the record what the changes that have occurred in 1986 and 1985 were related to.

ANSWER:

Changes in the revised Automation Master Plan are related to revision of automation priorities as established by the ADP Coordinating Committee under the direction of the Commissioner of Patents and Trademarks. For patents, highest priority was given to implementing system functions and features that would contribute to improving patent quality through enhanced file integrity utilizing the electronic data bases and through additional search tools to allow the data bases to be used effectively. Priority also was given to cost savings and productivity improvements to PTO operations and services to the public. For Trademarks, beyond short-term improvements in data base quality and system operations, priority was given to integrating the trademark systems developed during the last three years and improving the level of performance to better support trademark operations and anticipated public users of the system.

Patents

QUESTION:

What has been the general reaction among the patent community related to your success so far in achieving patent pendency in 22 months by 1987?

ANSWER:

In general, the patent user community seems to be pleased with the progress we have achieved thus far on our goal to reduce patent pendency to 18 months. Their collective attention now seems to have turned toward the improvement of patent quality, an issue with which we have concerned ourselves throughout the pendency reduction effort.

Trademark

QUESTION:

How has the trademark community responded to your initiatives since 1981?

ANSWER:

The trademark community has been generally supportive of accomplishments in the Trademark Office since 1981. In particular, the reduction of the significant backlogs, the reduction of the pendency period to initial examination of new applications to three months, and the reduction of the time to registration to thirteen months have been well received. Recent meetings with the representatives of the Bar indicate that there is also a strong belief that the quality of trademark examination is as good as it ever has been although occasional problems are encountered in the area of consistency of practice between Trademark Examining Law Offices. Areas of concern remain:

- Removal of all restrictions arising from the exchange agreements to access to the trademark data base. The PTO proposed a "buy-out" of the existing trademark agreements and received Department of Commerce concurrence with the use of surplus Trademark fees for this purpose. The "buy-out" would actually constitute replacing the agreements with competitive procurements that would remove restrictions on the use of the backfile and prospective trademark data bases. These "buy-outs" are still being negotiated.
- Data quality in automated trademark records. The PTO is exerting its efforts to ensure high quality in all automated trademark records.
- Potential impact of automated searching on the quality of trademark examination. This is being monitored in the Trademark Office through the quality review program.
- Continuing high attrition levels for experienced examining attorneys in the Trademark Office.
- Backlog of cases at the Trademark Trial and Appeal Board brought on by the production increases relating to the pendency reduction efforts. A proposed staff increase in FY 1987 addresses this concern.

- Accountability for expenditures of trademark fee income on costs incurred outside of the Trademark Examining Operation and the Trademark Trial and Appeal Board. The PTO is working with the user community in preparing cost and income statements which will meet their needs.
- Potential fees for public access to automated systems containing trademark application and registration records. Both versions of the PTO's pending authorizing legislation - H.R. 2434 as passed by the House and H.R. 2434 as approved by the Senate Committee on the Judiciary- would prohibit the imposition of fees for the use of the patent and trademark search rooms and libraries.
- Application of the Balanced Budget and Emergency Deficit Control Act of 1985 (Gramm-Rudman-Hollings) to Trademark fee income.

Administration

QUESTION:

Discuss the $210,000 and nine position increase related to administrative services. This brings your total administrative services budget to $6,742,000 and 191 permanent positions. Are these overhead positions fully supported by fees, or are they supported by appropriations from the general revenues?

ANSWER:

In addition to the traditional administrative functions such as personnel, equal employment opportunity programs, management analysis, general services, and procurement, the Administrative Services line item includes functions which are not overhead but are a direct part of the processing pipeline for patent and trademark applications. These functions include the file retrieval activities and the first part of the pre-examination activities.

The file activities include the filing and retrieval of patent and abandoned patent applications and registered trademarks and abandoned trademark applications. Examination of pending applications depends heavily on timely retrieval and delivery of related applications.

The Administrative Services pre-examination activities cover the initial examination of the patent and trademark applications and related papers to establish the mail receipt date, the assignment of the fee codes, the assembly of the application into a file wrapper and the assignment of the serial number and bar code label for identification.

It is this pre-examination activity for which the $210,000 and nine positions increase is requested. The scope and complexity of these initial processing steps increased significantly with recent legislation which established a two-tiered fee structure and granted more flexibility in filing requirements to applicants. In addition, the increased volume of patent and trademark application filings has dramatically increased the workload of this pre-examination activity. Since this is the first processing step for all documents received by the PTO, any delays or backlogs which develop increase the pendency time of the effected patent and trademark applications.

A break out of traditional administrative functions versus processing functions follows: (dollars in thousands)

	FY 1987 Base		FY 1987 Increase		FY 1987	
	FTE	Amount	FTE	Amount	FTE	Amount
"Traditional" Admin. functions	106	$4,936	...	...	106	$4,936
Processing functions	76	1,596	+9	+$210	85	1,806
Total	182	$6,532	+9	+$210	191	$6,742

In FY 1986 the Administrative Services line item was reduced by $697,000. The processing function is fully funded by fees and the "Traditional" Administration functions are funded by budget authority.

Funding for the Administrative Services has decreased since 1985, (dollars in thousands):

	1985 Actual	1986 Currently Available	1987 Base
Administrative Services	$6,607	$6,272	$6,532

The increase from the 1986 currently available level to the 1987 base level is attributable to the restoration of the 5% pay cut and inflationary adjustments to social security and space rental.

The funding of Administrative Services is provided by a mixture of fees and budget authority. Those activities that are clearly identified as governmental operations are funded strictly by budget authority. Those activities that directly contribute to the patent or trademark process or public services are funded either by fees (in the case of trademark support or public services support) or by a combination of both (patent process support). The attribution of the level of effort between processes that determines the source of funding is made by the program manager most closely involved with the day to day operation of the cost center. With this methodology we assure the most equitable distribution of program costs.

Fees

QUESTION:

Is there a way to segregate what the fees pay for in terms of overhead versus program costs?

ANSWER:

Yes. Within the past year we developed a system to be implemented this year that will specifically capture overhead and process costs for each office within the PTO. In the process of developing this system, we formulated a set of rigorous definitions of functions for each office so that we could determine appropriate funding sources. Concurrently, the administrative offices which have both process and non-process functions have devised a new system of workload recording and measuring in order to more accurately determine where their effort is being expended and what types and amounts of funding are appropriate.

TUESDAY, MARCH 18, 1986.

NATIONAL BUREAU OF STANDARDS

WITNESSES

ERNEST AMBLER, DIRECTOR, NATIONAL BUREAU OF STANDARDS
RAYMOND G. KAMMER, DEPUTY DIRECTOR
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KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION
CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION
MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. DWYER. Good afternoon. We begin with the National Bureau of Standards. Here to testify is the Director, Dr. Ernest Ambler. The budget request for fiscal year 1987 is $123,953,000, which represents an increase of $5,299,000 above the adjusted 1986 appropriation after the Gramm-Rudman sequestration of $5,331,000.

At this point we shall insert the justifications in the record.

[The justifications follow:]

DEPARTMENT OF COMMERCE

SCIENTIFIC AND TECHNICAL RESEARCH AND SERVICES

Budget Estimates, Fiscal Year 1987
Congressional Submission

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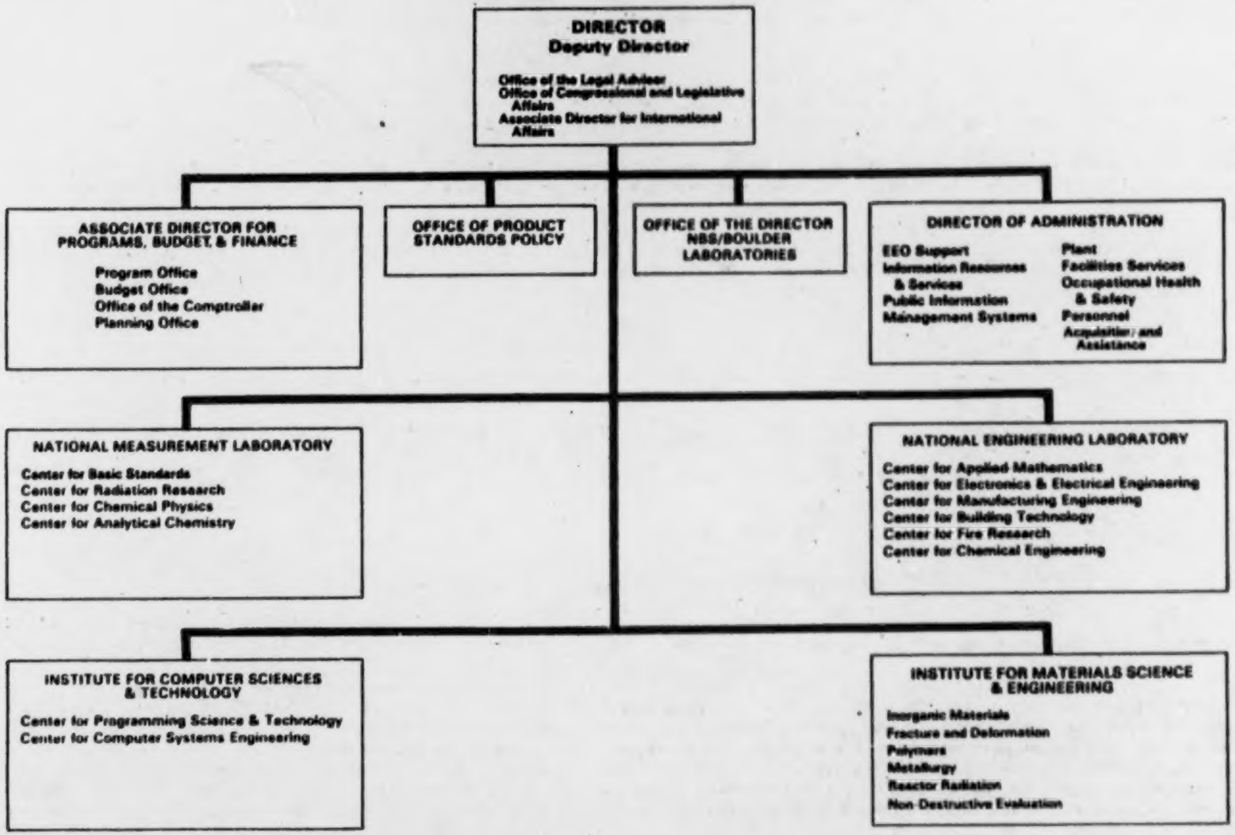
U.S. DEPARTMENT OF COMMERCE
National Bureau of Standards



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Inorganic Materials
Fracture and Deformation
Polymers
Metallurgy
Reactor Radiation
Non-Destructive Evaluation

General Statement

The National Bureau of Standards, by authority granted in its Organic Act in 1901, is charged with providing the basic measurement foundation for U.S. industry, government, science, and technology. It does so by developing and disseminating authoritative methods of measurement, evaluated technical data and standards, information on the properties of materials, and guidance on the use of these measurement tools. The ability to effectively use the results of research and development often depends upon the availability of basic measurements and data. NBS serves as the effective link for translating research and development achievements into industrial innovation and productivity improvements by providing these basic measurements and data. NBS remains the only Federal laboratory with the explicit goal of serving U.S. industry and science with this important link to innovation and productivity improvements.

The Scientific and Technical Research and Services appropriation provides funds to support the mission of the National Bureau of Standards. The 1987 estimate included in this request is provided below:

(Dollar amounts in thousands)

	1986 Appropriation Currently Available		1987 Estimate		Inc. (+) or Dec. (-)		
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Emp. 12/31
Scientific and Technical Research and Services................	1,768	$123,985	1,625	$123,953	-143	-$32	1,586

NBS programs fall into the following subactivities:

- Measurement research and standards - This program conducts research in the areas of fundamental physical constants; radiation; analytical chemistry, and chemical properties and processes and supports the measurement technology transfer activities that make the application of the results of NBS work to industrial and scientific needs possible.
- Materials science and engineering - This program supports research in materials characterization, metallurgy, metals processing, polymers, and ceramics which permits more rapid industrial adoption of innovative technologies that contribute to improved productivity and competitiveness.
- Engineering measurements and standards - This program provides measurement and standards related services and physical property data in the areas of electronic and electrical engineering, chemical engineering metrology, manufacturing research and standards, mathematical sciences, building research, and fire research which promotes the Nation's domestic commerce and international trade, economic growth, and technological advancement.
- Computer sciences and technology - This program establishes government-wide automated data processing (ADP) standards and provides technical support for international standards development which leads to more effective use of computers and networks.

- Research support activities - This subactivity groups the centrally managed programs that provide support to all other NBS programs. This support includes the technical competence and research associate programs, computing support, product standards, facilities modifications and improvements, and transfer to the working capital fund for Standard Reference Materials.

Highlights of Fiscal Year 1987 Changes

The request for the Scientific and Technical Research and Services appropriation in fiscal year 1987 is $123,953,000, a decrease of $32,000 from 1986. The primary mission of NBS is to provide the measurement services and data needed to accelerate the development and utilization of science and technology. In order to lay the measurement foundation required by science and industry, NBS work must be at the scientific frontiers -- anticipating, rather than following, technical innovation. The only way NBS can keep pace with the increasing sophistication and pervasiveness of technology is through selected program expansions which reflect key growth areas of the economy. Therefore, we have proposed increases for the most critical areas of research while also proposing decreases in view of overall fiscal constraints. A summary of the changes requested in this budget submission are:

a) Adjustments to base and built-in changes. (-45 positions: +$3,724,000). The requested adjustments to base represent the minimum amount required in order to maintain approved NBS programs at their current level in fiscal year 1987.

b) Increases in the following programs: Advanced ceramics (+4 positions; +$783,000). This increase would allow NBS to continue to address the need for technical information and measurement services to support the production of reliable high-performance ceramics (NBS-34). Fiber-optics (+8 positions; +$950,000). This increase would fund the development of measurement technology and services for the components of fiber-optic systems in order to ensure international competitiveness in this emerging technology (NBS-50). Scientific computing support (+$550,000). This increase would enable NBS to provide for the expertise, in the form of computer scientists and computer systems specialists, to improve the productivity of the Department of Commerce Scientific Computer System (NBS-69). Cold neutron research facility (+31 positions; +$10,000,000). This increase would permit NBS to establish a Cold Neutron Research Facility that will provide a unique capability for measuring the properties, performance, and processing of high technology materials (NBS-70).

c) Decreases in the following programs: Building research (-41 positions; -$3,100,000) and Fire research (-40 positions; -$5,141,000). Budget priorities for NBS were formulated with particular concern for areas where the Federal government may be undertaking efforts that are more properly the role of the private sector and State and local governments. Building and fire regulations and safety are traditionally overseen by State and local governments. In addition, the construction industry, insurance companies and associations have economic incentives to assure and improve building and fire safety (NBS-52 and NBS-53). Computer sciences and technology (-35 positions; -$4,657,000). The computer sciences and technology program would be reduced to $5,000,000. NBS will continue to concentrate its standards and guidelines development activities in areas that support ADP needs of the Federal government (NBS-59). Technical competence program (-25 positions; -$1,500,000). This request brings NBS more in line with White House Science Council (Packard Committee) recommendations concerning laboratory funds (NBS-73). Research associate program (-$1,641,000 and 24 other than permanent positions) (NBS-74). Funds for this program are reduced to reflect less dependence on the recruiting mechanism of the Postdoctoral Research Associate program.

Reimbursable Program

NBS' reimbursable services consist of technical work performed for other Federal agencies, state and local governments, and the private sector, including calibrations and special tests, advisory services, and the sale of Standard Reference Materials. The unique measurements and standards expertise developed with appropriated funding gives NBS the capability to perform these services on a reimbursable basis. Each program description includes examples of reimbursable services completed in fiscal year 1985. NBS accepts other agency work based on an established set of criteria which include (1) the need for traceability of measurements to national standards; (2) the need for test methods which cannot or will not be done by the private sector; (3) work supported by legislation that authorizes or mandates certain services; and (4) work which would result in an unavoidable conflict of interest if carried out by the private sector or regulatory agencies.

Program Structure Change

This budget submission reflects the consolidation of the Fire Research subactivity into the Engineering Measurements and Standards subactivity. This allows all programs managed by the National Engineering Laboratory to be grouped into one subactivity.

The Automated Manufacturing Interface Standards, Mechanical Engineering Metrology, and Automated Manufacturing Research Facility line items within the Engineering Measurements and Standards subactivity have been consolidated into one line item titled Manufacturing Research and Standards.

The newly titled Research Support subactivity includes the old Technical Competence subactivity as a line item; includes the line items from the Central Technical Support subactivity and incorporates Engineering and Product Standards line item from the Engineering Measurements and Standards subactivity.

These changes are displayed in the Activity/Subactivity Change Crosswalk (NBS-5). These program structure changes more accurately align the programs into the laboratories where they are managed and group all supporting programs into one subactivity. This should facilitate the review of the NBS budget. All information previously provided on these programs will still be available.

Activity/Subactivity Change Crosswalk
(Dollar amounts in thousands)

Format of Fiscal 1986 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Scientific and technical research and services:	
Measurement and engineering research and standards:	$99,379
(1) Measurement research and standards	39,314
(2) Materials science and engineering	22,790
(3) Engineering measurements and standards	32,275
(4) Computer sciences and technology	5,000
(5) Fire research	...
Competence and central technical support:	24,574
(1) Technical competence fund	7,465
(2) Central technical support	17,109
Total requirements	123,953

Format of Fiscal 1987 Congressional Budget Submission

Appropriation/Activity/Subactivity	Amount (1987 Request)
Scientific and technical research and services:	
Measurement and engineering research and standards:	$123,953
(1) Measurement research and standards	39,314
(2) Materials science and engineering	22,790
(3) Engineering measurements and standards	29,185
(4) Computer sciences and technology	5,000
(5) Research support activities	27,664
Total Requirements	123,953

DEPARTMENT OF COMMERCE

NATIONAL BUREAU OF STANDARDS

Appropriation Account: Scientific and Technical Research and Services

Appropriation Language and Code Citations:

1. For necessary expenses of the National Bureau of Standards,

15 U.S.C. 272; 273; 278b-e,(h)
15 U.S.C. 290b-f
15 U.S.C. 1454(d), 1454(e)
15 U.S.C. 1512
40 U.S.C. 759(f)

15 U.S.C. 272; 273, 278b-e provide basic authority for the performance of the functions and activities of the National Bureau of Standards.

15 U.S.C. 290b-f direct the Secretary of Commerce to provide for the collection, compilation, critical evaluation, publication, and dissemination of standard reference data.

15 U.S.C. 278h authorizes appropriations for performance and functions of the National Bureau of Standards.

15 U.S.C. 1454(d), 1454(e) assign responsibilities to the Secretary of Commerce to determine when undue proliferation exists, to develop and publish voluntary product standards, and to maintain surveillance of such standards.

15 U.S.C. 1512 provides "it shall be the province and duty of said Department to foster, promote, and develop the foreign and domestic commerce... of the United States."

40 U.S.C. 759(f) authorizes the Secretary of Commerce to undertake research in the science and technologies of automatic data processing computer and related systems and to establish uniform Federal standards.

2. $123,953,000 to remain available until expended;

no specific authority

31 U.S.C. 718 - Appropriations in annual Appropriation Acts not permanent, states: "No specific or indefinite appropriations... shall be construed to be permanent or available continuously... unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the Appropriations Act in which it is contained makes provision".

3. of which not to exceed $2,144,000 may be transferred to the "Working Capital Fund."

15 U.S.C. 278b

15 U.S.C. 278b provides in part: "The National Bureau of Standards is authorized to utilize in the performance of its functions the Working Capital Fund..."

Additional authorizing legislation to be proposed for fiscal year 1987.

Summary of Resource Requirements
(Dollar amounts in thousands)

Appropriation: Scientific and Technical Research and Services

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			1,768	$123,985
	Adjustments to base and built-in changes:				
NBS-11	Other increases	...	+$4,384		
NBS-15	Other decreases	-45	-660		
	Subtotal, adjustments to base and built-in changes			-45	+3,724
	1987 Base			1,723	127,709

Page No.	Comparison by activity:		1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Appropriation Program Changes Inc.(+) Dec.(-) Perm. Pos.	Appropriation Program Changes Inc.(+) Dec.(-) Amount
	National Bureau of Standards											
NBS-17	Measurement and engineering research and standards:											
	Measurement research and standards	Appropriation..	498	$34,881	521	$37,121	535	$39,314	535	$39,314	...	...
			(509)	(34,592)	(517)	(36,674)	(549)		(549)	(38,590)	(...)	
		Reimbursements..	(350)	(26,067)	(361)	(27,167)			(371)	(28,684)		
NBS-29	Materials science and engineering:	Appropriation..	267	19,297	286	21,108	293	22,007	297	22,790	+4	+783
			(274)	(18,888)	(287)	(20,547)	(304)		(307)	(22,030)	(+3)	
		Reimbursements..	(195)	(12,287)	(201)	(13,402)			(207)	(14,046)		

			1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
Page No.	Comparison by activity:		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
NBS-38	Engineering measurements and standards	Appropriation..	576	$37,025	564	$36,473	512	$36,476	439	$29,185	-73	-$7,291
			(590)	(37,190)	(583)	(37,043)	(532)		(447)	(28,834)	(-85)	
		Reimbursements..	(661)	(40,762)	(682)	(44,126)			(702)	(44,106)		
NBS-56	Computer sciences and technology	Appropriation..	172	10,000	169	9,657	147	9,657	112	5,000	-35	-4,657
			(176)	(10,966)	(174)	(9,723)	(154)		(113)	(5,004)	(-41)	
		Reimbursements..	(44)	(2,664)	(45)	(4,645)			(47)	(4,808)		
NBS-62	Research Support Activities	Appropriation..	233	22,282	228	19,626	236	20,255	242	27,664	+6	+7,409
			(276)	(21,034)	(272)	(22,144)	(279)		(235)	(27,396)	(-44)	
		Reimbursements..	(18)	(9,435)	(18)	(7,692)			(19)	(7,913)		
	Change....................................										-98 (-167)	-3,756
	Total, National Bureau of Standards	Appropriation..	1,746	123,485	1,768	123,985	1,723	127,709	1,625	123,953		
			(1,825)	(122,670)	(1,833)	(126,131)	(1,818)		(1,651)	(121,854)		
		Reimbursements..	(1,268)	(91,195)	(1,307)	(97,032)			(1,346)	(99,557)		
	Total all sources, National Bureau of standards..........................		(3,093)	(213,865)	(3,140)	(223,163)			(2,997)	(221,411)		

Page No.	Comparison by activity:		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
			Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	National Technical Information Service											
NBS-76	Dissemination of technical information	Appropriation..	...	...	...	...	...	...	...	...	...	...
			(...)	(58)	(...)	(...)	(...)		(...)	(...)	...	
	Change..................................										-98	-3,756
											(-167)	
	Total requirements	Appropriation..	1,746	123,485	1,768	123,985	1,723	127,709	1,625	123,953		
			(1,825)	(122,728)	(1,833)	(126,131)	(1,818)		(1,651)	(121,854)		
		Reimbursements..	(1,268)	(91,195)	(1,307)	(97,032)			(1,346)	(99,557)		
	Total all sources, Science and Technical Research................		(3,093)	(213,923)	(3,140)	(223,163)			(2,997)	(221,411)		

NOTE: Appropriation amounts not in parenthesis represent permanent positions and budget authority. Appropriation and reimbursable amounts shown in parenthesis represent total work years and obligations. Reimbursable obligations for 1986 and 1987 represent best estimates of the funding levels.

Justification of Adjustments to Base and Built-In Changes

(Dollar amounts in thousands)

Other Increases

	Perm. Pos.	Amount
Full-year cost in 1987 of positions financed for part year in 1986		
Within-grade step increases	...	$560
Personnel benefits	...	....
Restoration of proposed 5 percent pay cut	...	246
Travel and transportation of persons	...	485
Communications, utilities, and other rent	...	32
Other services	...	321
Supplies and materials	...	232
Equipment	...	166
Subtotal, other increases	...	2,342
	...	4,384

	Perm. Pos.	Amount
Full-year cost in fiscal year 1987 of positions financed for part year in fiscal year 1986	...	+560

An additional $560,000 is required in fiscal year 1987 to cover full-year cost of positions financed for part year in fiscal year 1986. The lapsed funds are for 13 staff years. This provides full-year financing with a five percent lapse.

	Perm. Pos.	Amount
Within-grade step increases	...	...

The increase of $865,000 to cover the cost of within-grade step increases is being absorbed. The increased cost was computed as follows:

Estimated number of within-grade step increases scheduled	
Step increases not earned due to turnover	1,546
Average step above step 1 per separation	121
Average cost per within-grade step increase	2
Gross cost of scheduled step increases	$983
Less savings due to separations	$1,519,718
Subtotal, personnel compensation	-237,886
Personnel benefits	1,281,832
Total cost	114,083
STRS share (62 percent)	1,395,915
	$865,467
Amount absorbed	-$865,467

Personnel benefits	...	+246
Health insurance premium	45	
Social Security contribution (FICA)	201	

Health insurance premium (+$45,000) - NBS' contribution to the Federal Health Benefit Program increased by $73,000 as a result of the changes by the insurers effective January 1, 1985. The STRS share of this increase is $45,000. The total increase was computed based on employee participation in the various health benefit plans and the associated increases.

NBS' contribution to Social Security will increase $269,000 by fiscal year 1987 as the result of an amendment to the Social Security Act which requires that the Federal Government pay its share of both Social Security coverage and Civil Service Retirement for all new Federal employees hired after January 1, 1984. Increases in the Medicare tax rates in 1987 will cost NBS an additional $55,000. The STRS share of these increases is $167,000 for FICA and $34,000 for Medicare.

Restoration of proposed 5 percent pay cut	...	+485

Full costs of the pay cut restoration were $2,414,000. The amount funded in fiscal year 1986 was $1,929,000, leaving $485,000 to be funded in fiscal year 1987.

Travel and transportation of persons	...	+32
Domestic airfare	27	
International airfare	5	

The Department of Transportation reported an increase of 3.5 percent in their domestic travel cost during the past year. The resulting STRS increase of $27,000 for domestic airfares was calculated by applying this percent to the STRS estimate of $781,000.

The Department of Transportation estimated that international airfares have increased an average of 2.3 percent during the past year. The STRS share of this increase is $5,000 calculated on an estimate of $233,000.

Communications, utilities, and other rent		...	+321
Other telephone	17		
Postage	38		
Utilities	197		
Rental of equipment	69		

Other telephone services (+$17,000) - NBS' costs for telephone services for voice and data communications increased $28,000 as the result of rate increases which have occurred since the fiscal year 1986 budget estimates were prepared. The STRS share of this increase is $17,000.

Postage (+$38,000) - Domestic postage has increased 9.5 percent over fiscal year 1985. The increase of $38,000 was calculated by applying this percentage to the fiscal year 1986 estimate of $403,000.

Utilities (+$197,000) - This adjustment to base is required to pay the additional cost of utilities arising from the rate increases and fuel cost adjustments which have occurred since the original fiscal year 1986 estimates were prepared. The following table illustrates how much the utilities have been affected by these increases.

	FY 1986 Budget	Revised FY 1986 Estimate	Increase in Cost
Electricity	$3,697	$3,835	+$138
Gas	1,846	1,846	...
Water/Sewer	405	464	+59
Total	5,948	6,145	+197

Rental of equipment (+$69,000) - This amount is requested to pay the additional cost of equipment rentals. The increase was calculated by applying the 1984 GNP price deflator for Federal Government Purchases of Goods and Services (3.7 percent) to the fiscal year 1986 estimate of $1,855,000 for equipment rentals.

Other services ... +232

Estimated costs for recurring contractual support services have increased significantly. This increase is due principally to increases in salary costs for the services performed, increases in costs for materials and supplies, and increases for equipment maintenance. A detail by service follows:

Services	FY 1986 Budget	Revised FY 1986 Estimate	Increase in Cost
Maintenance of Equipment	$1,611	$1,671	$60
Mountain Administrative Support Center	934	975	41
Agreement between NBS and the University of Colorado for support of the Visiting Scientists program	497	507	10
Agreement between NBS and the Joint Institute for Laboratory Astrophysics for support services	323	335	12
Hazardous waste disposal	8	12	4
Data evaluation services provided by university, industrial, and government laboratories	540	565	25
Working Capital Fund, General Administration	930	1,010	80
Total	4,843	5,075	232

Supplies and materials ... +166

Laboratory and general supplies	152
Scientific publications and journals	14

Laboratory and general supplies (+$152,000) - Continued inflation in the price of supplies and materials is a significant factor that must be considered to prevent a serious reduction in the current level of supplies and services. An additional $152,000 is necessary to maintain supplies for ongoing programs at the fiscal year 1986 level in fiscal year 1987. This increase was calculated by applying the 1984 GNP price deflator for Federal Government Purchases of Goods and Services (3.7 percent) to the fiscal year 1986 estimate of $4,114,000 for laboratory and general supplies.

Scientific publications and journals (+$14,000) - NBS, a research oriented institution, must keep current with literature on relevant research topics. Maintaining a central library facility with up-to-date material is crucial. Based on an analysis of actual cost increases incurred by NBS central library facility for scientific journal purchases between calendar years 1984 and 1985, an additional $22,000 is required in fiscal year 1987. The STRS share of this increase is $14,000.

Equipment		...	+2,342
Special laboratory equipment	42		
Equipment depreciation	2,300		

Special laboratory equipment (+$42,000) - The cost for special laboratory equipment increased $42,000 over the amount requested in the fiscal year 1986 budget. This amount, needed to offset increased costs due to inflation, was calculated by applying the 1984 GNP price deflator for Federal Government Purchases of Goods and Services (3.7 percent) to the 1986 estimate of $1,132,000. A similar quantity will be required in fiscal year 1987 to permit continued operation of existing programs at their current levels. Failure to acquire these funds will cause unavoidable delays in many technical programs. The special laboratory equipment differs from general purpose equipment in several respects: it is not of general utility but is purchased for particular purposes; it has a useful life of less than one year and is not depreciated; and it is not considered an investment of the Working Capital Fund. Examples include instruments used in radioactive environments.

Equipment depreciation (+$2,300,000) - Funding of $2,300,000 is requested to finance the STRS portion of the $3,800,000 increase in equipment replacement cost caused by the effects of inflation. The requested funds represent the increased STRS collections from depreciation in fiscal year 1987 as a result of implementation of a replacement costing system.

The Working Capital Fund in the past has recovered only its original investment in equipment and not the actual replacement cost. It is reimbursed for its investment in equipment through charges each year for depreciation over the useful life of the assets. However, in the recent times of continually rising prices, the original investment recovered is insufficient for the replacement of equipment. In order for NBS to maintain its current equipment level, legislation has been passed which enables the Working Capital Fund to recover the replacement costs of its equipment. Additional funding of $2,300,000 is necessary to phase in the replacement cost concept addressed in the legislation that amends the NBS Organic Act. This represents the STRS share of the increase in the replacement cost of the current NBS equipment inventory. The requested funding adjustment will also allow NBS to maintain its current level of equipment purchases in fiscal year 1987.

Other Decreases

Reduced appropriation transfer for Standard Reference Materials	...	-$100
Employees' Compensation Fund	...	-26
Federal Telecommunications System	...	-7
A-76 Savings	...	-527
Subtotal, other decreases	...	-660

Reduced appropriations transfer for Standard Reference Materials	...	-100

In fiscal year 1986, $300,000 will be transferred to the Working Capital Fund to capitalize research and development costs associated with specific Standard Reference Materials. The $100,000 decrease in FY 1987 reflects the third increment in a five-year plan to reduce appropriations for transfer to the Working Capital Fund. Only $200,000 will be transferred to the Working Capital Fund in fiscal year 1987.

Employees' Compensation Fund.......... ... -26

Based upon information from the Department of Labor, the STRS share of our bill is $333,000 for the period July 1, 1984 through June 30, 1985 and is payable in 1987. The 1986 STRS estimate is $359,000. This new bill represents a decrease of $26,000.

Federal Telecommunications System.......... ... -7

The decrease in Federal Telecommunications System charges is based on a distribution of rate and usage charges as determined by the General Services Administration.

A-76 Savings.......... -45 -527

Estimated savings resulting from productivity reviews completed in FY 1986.

Justification of Program and Performance

Activity: Measurement and Engineering Research and Standards
Subactivity: Measurement Research and Standards

(Dollar amounts in thousands)

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos..	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fundamental physical measurements and standards	Appropriation....	172	$13,296	182	$14,734	186	$15,290	186	$15,290	...	...
		(177)	(13,152)	(184)	(14,295)	(193)		(193)	(14,881)	(...)	
	Reimbursements....	(56)	(5,478)	(58)	(5,752)			(59)	(6,040)		
Radiation measurements and standards......	Appropriation....	152	9,955	148	9,213	152	9,678	152	9,678	...	...
		(155)	(9,801)	(152)	(9,356)	(156)		(156)	(9,681)	(...)	
	Reimbursements....	(94)	(6,454)	(97)	(6,777)			(100)	(7,114)		
Analytical chemical measurements and standards..........	Appropriation....	56	3,256	55	3,748	57	3,955	57	3,955	...	...
		(57)	(3,472)	(56)	(3,800)	(58)		(58)	(3,956)	(...)	
	Reimbursements....	(101)	(6,637)	(104)	(6,970)			(107)	(7,318)		
Chemical properties and processes	Appropriation....	52	3,906	71	5,303	73	6,121	73	6,121	...	...
		(53)	(3,872)	(59)	(5,050)	(74)		(74)	(5,800)	(...)	
	Reimbursements....	(43)	(2,825)	(44)	(2,966)			(46)	(3,114)		
Measurement technology transfer	Approoriation....	66	4,468	65	4,123	67	4,270	67	4,270	...	...
		(67)	(4,295)	(66)	(4,173)	(68)		(68)	(4,272)	(...)	
	Reimbursements....	(56)	(4,673)	(58)	(4,702)			(59)	(5,098)		
Total requirements	Appropriation....	498	34,881	521	37,121	535	39,314	535	39,314	...	...
		(509)	(34,592)	(517)	(36,674)	(549)		(549)	(38,590)	(...)	
	Reimbursements....	(350)	(26,067)	(361)	(27,167)			(371)	(28,684)		

NOTE: Appropriation amounts not in parenthesis represent permanent positions and budget authority. Appropriation and reimbursable amounts shown in parenthesis represent total work years and obligations. Reimbursable obligations for 1986 and 1987 represent best estimates of the funding levels.

Goals and Objectives

The goal of this subactivity is to provide the Nation with physical and chemical standards, measurement methods, reference materials, and reference data as a basis for uniform and accurate measurements. These outputs support the major DoC goal of promoting the development and application of science and technology in U.S. industries.

Objectives:

- Maintain, disseminate, and improve the present standards for temperature, pressure, mass, length, time, frequency, and electrical quantities which are required in industry, commerce, medicine, transportation, government, and scientific research; disseminate a uniform national measurement system for physical and chemical measurements in the United States and represent that system in international agreements.
- Maintain, disseminate, and improve standards and measurement techniques for ionizing radiation and optical radiation to achieve the required accuracy, uniformity, and efficiency of radiation measurements with special emphasis on ionizing radiation dosimetry, optical radiometry and photometry; develop quantitative understanding of the interactions of electron, neutron and photon radiation with matter necessary for development of ionizing radiation dosimetry standards, optical radiation standards, and reference radiation detectors, and for the safe and effective use of radiation.
- Develop compositional measurement methods and standards for qualitative and quantitative chemical analyses of inorganic elements, inorganic species, gas mixtures, and organic compounds required by industry for economical quality control, by medical laboratories for efficient and reliable health care delivery, by Government agencies for technically sound regulations, and by scientific research institutions and standards organizations.
- Determine physical and chemical properties and develop state-of-the-art measurement techniques needed for the improved design and optimization of chemical and other industrial manufacturing processes and for new applications of science that will reduce barriers to technological innovation.
- Develop methods for characterizing Standard Reference Materials (SRM's) and reference methods for use with SRM's. SRM's are important for quality control in manufacturing and materials accountability in commerce, for assuring proficiency and accuracy in testing laboratories, and for providing a uniform and reliable measurement basis for industry, science and technology.
- Foster the rapid and effective application of scientific results in industry and commerce through the provision of critically evaluated reference data to scientists, engineers, and the general public as mandated by the Standard Reference Data Act (P.L. 90-396).

Base Program

Fundamental Physical Measurements and Standards

This program maintains and improves standards for the physical units of time and frequency, temperature, pressure, vacuum, leak rate, length, mass, voltage, resistance and other electrical quantities. Measurements and calibrations made against these standards are disseminated to the point of use through transfer standards or other appropriate mechanisms. Virtually all types of industrial activities, research and development work in science and medicine, and the national defense system depend on support from this program. Fundamental physical constants affecting broad areas of scientific endeavor and industrial activity are measured using the staff expertise and instrumentation available at NBS. For example, NBS scientists are conducting an intensive study of the quantized Hall effect which was first discovered four years ago. This phenomenon will provide the basis for a new, more accurate atomic standard of electrical resistance based solely on physical theory and fundamental constants of nature. Stable accurate resistance standards are needed by electrical and electronic instrument manufacturers for quality control measurement in the defense and aerospace industries, and for monitoring film thickness in high technology coating applications.

This program also plays a vital role in industrial process and quality control essential for economic recovery and improvement of the international competitive position of U.S. industry. A typical project in the process and quality control program is the development of vacuum and leak rate standards initiated with fiscal year 1985 appropriations. NBS will develop the primary national standards, measurement methods, and precision instrumentation necessary to provide a wide variety of reimbursable measurement services to the public. Vacuum and leak rate technology is used throughout both low and high technology manufacturing and process industries to control product quality and predict performance lifetimes through non-destructive testing techniques. Other projects in the process and quality control program focus on research to address high priority measurement requirements in spectroradiometry, impedance, and microwave measurements. NBS will evaluate new transfer standards for transmitting the highest level of accuracy from national standards to the user's laboratory. For example, NBS will develop new measurement methods and physical standards for high priority microwave measurements such as power, attenuation, reflection coefficient, and noise in frequency ranges used in advanced communication and aerospace systems. NBS will also ensure that the U.S. national standards are compatible with those of other nations to enhance the competitiveness of U.S. manufactured instruments and products sold in domestic and foreign markets.

The scientific and technical expertise developed under this program also enables NBS to respond to the research and development requirements of other government agencies on a reimbursable basis. For example, the National Aeronautics and Space Administration (NASA) has contracted with NBS to develop techniques to improve the accuracy of its measurements of worldwide crustal movements and tectonic plate motions used in earthquake prediction. The Department of Defense (DOD) has a continuing program with NBS to provide very stable electrical transfer standards and automated measuring devices for use in calibrating military instruments and equipment. DOD also supports NBS in the development of a new and highly portable instrument for measuring absolute gravity, to be used in calibrating the relative gravimeters used in surveys for minerals and oils. The Federal Aviation Administration (FAA) has requested NBS to evaluate the accuracy maintained at altimeter repair and calibration shops in support of the FAA's program to reduce the vertical separation between aircraft. NBS was chosen to conduct these research projects because of its staff expertise and unique capability in the development of fundamental standards and new measurement methods and because measurements must be traceable to national standards.

Planned accomplishments in fiscal year 1986 include the following:

- Develop high accuracy test for AC/DC voltage converters to support a new generation of AC electrical instruments.
- Complete leak rate calibration system to provide standards for nondestructive quality control for a wide variety of industrial products from semiconductor devices to nuclear fuel containers.
- Complete measurement system for calibration of industrial high-temperature optical fiber thermometers.
- Complete the NBS automated capacitance discharge measurement system for high-valued resistance standards (greater than 100 billion ohms) and offer a calibration service to ensure quality control in semiconductor fabrication.
- Determine the quantum Hall resistance in absolute units to the highest accuracy required and collaborate with other national standards laboratories through the International Bureau of Weights and Measures on adopting the value of this fundamental standard of resistance for international use.
- Complete the automation of the NBS facility for calibrating alternating current and voltage transfer standards to provide industry with higher calibration accuracy and reduced turnaround time and for ensuring the continued traceability of these electrical measurements to national reference standards.
- Construct and test ionizing radiation dosimetry systems to be used for quality assurance applications in hospitals, nuclear energy establishments, intermediate calibration laboratories, and industry.
- Develop and implement new techniques for extending the spectral irradiance scale to support research and procurement quality control in National defense programs and instrumentation used in remote-sensing applications.

- Develop an automated impedance measurement system using state-of-the-art techniques that permit higher accuracy and extended frequency range, and design a facility for dissipation factor measurements that will contribute to improved quality control in electronic manufacturing, e.g., measurements of precision capacitors for electronic sample-and-hold devices.
- Develop a cryogenic low-level electronic noise source and determine its limits of error for use as a microwave standard reference in the frequency ranges 18 to 26 and 40 to 60 GHz to assure quality control in the development and manufacture of microwave components and systems.

Planned accomplishments in fiscal year 1987 include the following:

- Demonstrate a new concept for real time control of clock output at remote sites using GPS satellite time transfer for scientific and industrial users who need the highest accuracy NBS time and frequency services.
- Demonstrate two-way time transfer techniques using commercial communication satellites at the sub-nanosecond accuracy level for international time and frequency comparisons.
- Complete construction of a new optically-pumped cesium frequency standard to improve the U.S. frequency measurement capability by almost an order of magnitude.
- Complete a recalibration of the U.S. mass standards in terms of the international prototype kilogram to improve the international compatibility of mass measurements made throughout U.S. science and industry.
- Develop a new generation of photofragmentation techniques to measure absolute reaction rates of chemical species important for understanding the release of energy in many combustion processes.
- Develop an ultrasensitive method to measure the excitation of atoms by electrons, a process important in a wide variety of plasma devices, such as lasers, lighting, and controlled thermonuclear reactors.
- Develop automatic radiometer comparators in the frequency ranges of 18 to 26 and 40 to 60 GHz for calibrating noise transfer standards to be used by the electronics industry.
- Complete development of dosimeter systems that can be circulated as transfer standards to users of ionizing radiation to ensure measurement quality assurance in radiation therapy and radiation protection applications.
- Develop a well-characterized, high accuracy, portable ultraviolet radiation standard that can be used as a transfer standard for applications in UV laser development, space research, radiation processing, and radiation effects testing.
- Complete automated temperature measurement facility to improve calibration service and test commercial systems.

Radiation Measurements and Standards

This program conducts basic and applied research in ionizing radiation physics, optical radiation physics, plasma physics, ultraviolet physics, electron physics, and nuclear structure in order to improve the understanding of the interaction of radiation with matter. Using this research as a basis, NBS is developing standards for radiography, dosimetry, optical and ultraviolet radiation, radioactivity, gamma and X-rays, neutron beams and fields, and plasmas. NBS is also publishing critical data on atomic transitions and the interaction of ionizing radiation with matter. Through its research to understand and measure various forms of radiation, NBS produces measurement technology and information that is used to enhance industrial productivity, assure public health and safety, explore outer space, control radioactivity in the environment, conduct energy research, design advanced telecommunications equipment, and evaluate food irradiation dosimetry. NBS is collaborating with high-tech industry in the use of polarized electron beams to investigate surface magnetism and characterize ferromagnetic glasses; collaborating with industry and the medical profession in the use of multi-channel photoelectronic detection and digital image processing to improve diagnostic methods and standards for medical, dental, and industrial radiography; and is collaborating with industry, universities and government laboratories in the development of infrared and synchrotron ultraviolet radiation measurement and calibration techniques for the study of optical properties of materials, remote sensing, ionization dynamics and defense applications.

The scientific and technical capabilities developed in this program have enabled NBS to develop Standard Reference Materials, calibration services, and measurement methods and standards in response to the requirements of other government agencies and industry. For example, NBS has developed SRM's for the medical industry which provide quality control in the production of radiopharmaceutical materials for medical diagnosis and treatment. Primary calibrations of ionizing radiation sources and survey instruments have been provided to industrial, medical, dental, and defense organizations for personnel protection and radiography. Measurement methods and standards for quality control of infrared, visible, and ultraviolet radiation sources have been developed to meet the needs of national space programs, defense agencies, academic research organizations, and the radiation processing, lighting, and communication industries. For example, dosimetry standards developed by NBS have enabled industry to maintain a high level of quality control in the radiation sterilization of medical supplies.

The measurement expertise developed under this program also enables NBS to respond to the research and development requirements of other agencies and industry on a reimbursable basis. For example, in continuing programs, the Department of Energy has requested NBS to measure and evaluate neutron cross section standards for use by national laboratories. The NBS neutron cross section values are used by DoE and related industries as benchmark standards against which all DoE and industry cross section measurements are referenced to ensure accuracy and consistency on a national basis. This in turn enables DoE and industry to design power reactors and neutron radiographic facilities for maximum cost effectiveness and safety. DoE has requested NBS to measure and evaluate atomic and plasma data needed by fusion programs. These data are required by DoE and industrial research groups to address major problems in the design of improved fusion energy devices and the development of high power lasers. DoE has also sought NBS assistance to develop a continuous wave electron accelerator to test new technologies which can be used in other accelerators. The Department of Defense has requested NBS to develop new measurement methods and standards for long-wave infrared radiation. Such standards are essential for calibration of infrared devices to the level of accuracy that is required for applications in surveillance measurements, missile guidance systems, etc.

Planned accomplishments in fiscal year 1986 include the following:

o Complete measurement and analysis of spectra of atomic ions to obtain a system of accurate wavelength standards for the extreme vacuum UV region from 6 to 60 nanometers. These standards are necessary for maintaining the required level of accuracy for long-term research measurements in national space, solar, and climate programs.

o Establish secondary calibration laboratory programs with the private sector and universities to provide measurement services in photometry and spectrophotometry.

o Put new pyrometer calibration system into use for calibration of instrumentation for industrial and government users. This NBS coordinated system of calibration laboratories will provide U.S. industry with a recognized basis for measurement accuracy that is essential for maintaining quality control and a competitive position in international trade.

o Use newly developed and unique NBS ultrahigh vacuum scanning magnetic microscope to measure high-resolution magnetic properties of selected materials and, through industrial collaborations, assess applications and significance.

o Develop and publish a description of recommended measurement quality assurance programs for secondary laboratories that test the performance of radiation measuring instruments. This description will provide new secondary testing laboratories with a sound technical model for achieving and maintaining the required level of accuracy in instrument testing that is urgently needed to ensure efficiency and safety in important medical, industrial, and defense applications of ionizing radiation.

o Measure yields of radiolytic products from the irradiation of selected proteins. These radiolytic products show promise for radiation dosimetry of foods. Radiation dosimetry is key to the maintenance of quality control and safety in the applications of radiation by the food industry for disinfecting, pasteurizing, and preparing foods.

Planned accomplishments in fiscal year 1987 include the following:

o Complete a major revision and expansion of the criteria used as the basis for accreditation of state-operated secondary calibration laboratories for ionizing radiation measurements.
o Complete international intercomparisons of photometric base units and absolute detector response in cooperation with the Consultative Committee on Photometry and Radiometry. These intercomparisons will expedite opening of international markets to U.S. products in the lighting, photographic, and related instrumentation industries.
o Measure radiation chemical yields (G-values) and optical molar absorptivities for the three major radiochromic dyes (malachite green, pararosaniline, and hexahydroxy ethyl pararosaniline) for the development of dosimeters.
o Develop prototypes of a new generation of chemical dosimeters for improving reliability of in-vivo radiation measurements in cancer patients in order to expedite treatment and reduce side effects.

Analytical Chemical Measurements and Standards

This program supports the chemical, clinical, instrument manufacturing, and metals-producing industries as well as many Federal programs related to environmental pollution, toxic substances, and health services. The program provides standards and measurement methods for high accuracy chemical analyses by: (1) investigating fundamental chemical and physical principles and concepts leading to new analytical procedures including the use of biomolecules as analytical reagents; (2) developing definitive test methods, which have been investigated exhaustively to remove bias and obtain high degrees of accuracy and precision; (3) modifying existing analytical methods to include new sample types and to permit accurate testing of samples with lower concentrations of important chemical constituents; and (4) performing standardization research. Approximately 150 million chemical analyses are made daily in the United States with annual expenditures estimated at $50 billion. These analyses consist of automated and single and multispecies determinations in areas affecting approximately two-thirds of the GNP. A broad range of industrial areas are served, including raw and finished materials, food processing, waste management and diagnostic technologies. Many important decisions are based on chemical analyses including those concerning medical care, the abatement of pollution, and market place equity. The reliability of these analyses assumes great significance for both personal well-being and cost control.

The measurement expertise developed under this program also enables NBS to respond to the research and development requirements of other agencies and industry on a reimbursable basis. For example, the Food and Drug Administration (FDA), the United States Department of Agriculture (USDA), and the International Atomic Energy Agency (IAEA) are working with NBS to develop methods for the analysis of trace elemental nutrients in food, of critical importance in determining human nutritional status on an international basis. The National Cancer Institute has sought NBS service as a reference laboratory for the determination of vitamins in serum as part of a major chemoprevention clinical trial study. NBS was requested to perform these tasks because of its staff capabilities in chemical analysis, the provision of accurate and precise measurements, and its capacity to act as an authoritative unbiased reference laboratory.

This program also produces Standard Reference Materials (SRM's) which are provided on a reimbursable basis to industry and Government agencies for a wide variety of uses. In providing SRM's, this program analyzes samples and certifies their elemental or molecular compositions. Examples of SRM's include: dioxin solution standards for use in accurate measurement of environmental exposure to these mutagenic compounds; boron in low alloy steels for use in quality control in steel production. SRM's and their respective quality assurance documents provide the bases for assessing measurement accuracy and reference to the national measurement system.

Planned accomplishments in fiscal year 1986 include the following:

- Prepare stable 15-component toxic organic gas standard with ppb concentration levels for EPA to provide quality assurance for the measurement of volatile toxic organics in ambient air.
- Develop microwave techniques for the dissolution of complex samples. The use of microwave heating will improve the efficiency and completeness of the dissolution of complex sample matrices thereby increasing the accuracy of the measurement. Better accuracy at less cost will be of great benefit to industry and other government agencies.
- Develop a model that addresses the random and non-random components of measurement uncertainties that affect the rigorous determination of limits of detection for chemical species. This could play a major role in the reliable application of chemical measurements to regulatory issues.
- Develop and apply distortionless enhancement polarization transfer techniques in nuclear magnetic resonance to measure biomolecules and to provide structural and conformational information critical to the characterization of biomolecules in solution.

Planned accomplishments in fiscal year 1987 include the following:

- Investigate bonding chemistry, substrate characteristics, and substrate/chemical interactions in chromatographic systems to establish fundamental parameters that affect the separation of complex organic mixtures. This information will serve as a basis for predicting and developing chromatographic columns to solve specific separation problems for the compositional analysis of complex mixtures.
- Develop tunable diode laser and ultraviolet photometry to measure stoichiometry of gas phase reactions. This information will serve as a measurement calibration base for determining trace gases such as oxides of nitrogen in the atmosphere, of importance to the national effort in assessing acid deposition and global tropospheric/stratospheric chemistries.
- Develop automated separation methods for a variety of analytical techniques to improve the accuracy in the overall analytical measurement process.
- Develop a definitive method for the determination of ascorbic acid in human serum. This methodology will be used for the certification of ascorbic acid and other water soluble vitamins in serum based SRM's.
- Develop supercritical fluid extraction techniques for removal of organic species from solid samples; analyze thermally labile/high molecular weight components in such extracts using both packed and capillary column supercritical fluid chromatography (SFC). This method will be used for the accurate determination of toxic organic pollutants in sediments, vitamins in freeze-dried serum, and other samples which require the extraction of organic species from solid samples.

Chemical Properties and Processes

This program provides the technical community with data and measurement methods dealing with basic chemical processes, chemical and physical properties of matter, and the manner in which these processes and properties change with temperature, pressure, and chemical composition. The measurements, standards and data of this program are important in such areas as chemical manufacturing, energy conversion, waste disposal, and atmospheric monitoring. The program's primary long term emphasis is on producing predictive models which will eliminate or minimize the need for costly laboratory measurements. Chemical properties are studied at the atomic and molecular levels. State-of-the-art experimental facilities are maintained to obtain fundamental measurements of the transients or intermediates in chemical processes in order to understand how reactions occur and the energy requirements for selection among alternate reaction paths. Theoretical efforts are combined with experimental efforts in order to minimize the number of experiments required and to maximize the usefulness of the output. Recently, measurement programs have been started in areas with high technology applications including high temperature organic reactions, surface chemistry, and biotechnology.

Congress appropriated $1,440,000 in FY 1986 to begin development of the measurement base necessary to meet the needs of the Nation's chemistry-based and related industries as they introduce biochemical processing methods and products. With these resources, NBS will develop selected experimental and theoretical techniques to measure biomolecules in the complex mixtures in which they are found or used. Measurements and calculations will be carried out to develop an understanding of the properties and chemical activity of biomolecules. These results will be used by NBS to provide key data and accurate predictions of chemical and physical properties which industry will use for product separation and process optimization and for the selection, design, and optimization of biocatalysts. NBS will design and verify analytical methods to be used by industry for improved analysis and quality control. The biotechnology program will facilitate selection and introduction of new or improved industrial processes and chemicals into the marketplace, thus contributing to the international competitiveness of the Nation's chemistry-based industries.

The measurement methods, standards, and data produced in the chemical properties and processes program are needed for the safe handling of potentially hazardous chemical materials; for the development of laser and other weapons for defense; for the design of more energy efficient processes; for energy conservation in industrial plants; for biochemical process optimization and quality control; and for reasonable regulations and demonstration of compliance. The outputs of this program provide the scientific foundation for important industrial processes. For example, evaluated data is provided to design engineers and the research community. Thousands of scientists and engineers in the chemical/petroleum industries use these data daily. This program's output saves these organizations millions of dollars per year in the acquisition of numerical data. In addition, research productivity is known to increase by as much as 10 percent by the provision of efficient access to evaluated technical information. New calibration data and standard techniques from this program reduce certain industry calibration costs by $6 million per year by reducing the number of hours required for each calibration.

Based on the scientific and technical capability developed under this program, NBS is able to respond on a reimbursable basis to the chemistry measurement and data requirements of various private sector organizations and other Federal agencies. These organizations call upon NBS because of its expertise in chemical data evaluation and state-of-the-art experimental capabilities for gathering key benchmark data necessary for accurate modeling of chemical processes. For example, fourteen chemical companies are supporting a three year data evaluation program to obtain thermodynamic values on solutions which are essential to the economic design of new industrial processes in biotechnology, speciality chemicals, and electronic materials. The Chemical Manufacturers Association requested NBS to assist them in the direct detection of chlorine containing molecules in the stratosphere. These molecules influence ozone destruction and their accurate measurement provides values needed in all atmospheric models. NASA has sought NBS assistance in its HALOE (Halogen Occulation Experiment) projects, which are designed to measure key constituents affecting the ozone balance in the upper atmosphere. The Department of Defense has asked for NBS assistance in measuring and estimating the chemical properties of a wide range of materials needed in military applications. NBS is providing the Department of Energy with the necessary chemical data to model combustion reactions which will be incorporated into the design of more energy efficient reactors and chemical processes. Also, chemical measurements are being made to understand the requirements for the effective use of urban wastes as refuse-derived fuels.

Planned accomplishments in fiscal year 1986 include the following:

- o Complete high accuracy measurements of core-level electron binding energies using several surface analysis techniques in order to obtain reference data for the calibration of instrument energy scales. These scales are essential for the identification and assignment of the chemical state of surface atoms.
- o Develop measurement techniques including those of very low pressure pyrolysis/mass spectrometry to measure the stability and reactivity of aromatic compounds important in the high temperature chemistry found in energy conversion systems and chemical processes.

- o Develop methods for evaluating and estimating properties of organic compounds in the condensed phase which can be used to optimize chemical yields, including those properties of interest to the biosciences.
- o Determine fundamental molecular properties of weakly bound, hydrogen bonded molecules from data obtained on a newly constructed microwave spectrometer. This information will be used in the modeling of biomolecular reactions and aqueous systems.
- o Develop and test reaction field methods for the calculation of energies and conformation of proteins and other biomolecules.

Planned accomplishments in fiscal year 1987 include the following:

- o Develop models of the fundamental processes involved in molecule-surface interactions such as charge transfer, energy redistribution, and chemical bond changes, to be used to understand the rates of chemical reactions on surfaces.
- o Develop measurement techniques based on multiphoton ionization to characterize short-lived reaction intermediates as a necessary step in modeling key industrial processes involving combustion and pyrolysis.
- o Develop analytical methods for the separation and detection of proteins and metallo-proteins in complex mixtures required for the determination of product purity in the industrial production of biomolecules.
- o Demonstrate the use of calculations involving chemical interactions in the active site of enzymes to more fully understand the relationship between structure and function in biocatalysts.
- o Develop models and measurements for solving the expensive problem of separation and purification of products from the complex broths found in industrial bioreactors.
- o Evaluate the reliability with which well characterized enzymes can serve as standards for commercial calorimeters.

Measurement Technology Transfer

The two programs described in this section, the Standard Reference Data (SRD) program and the Standard Reference Materials (SRM) program, are among the primary means by which NBS transfers its developed measurement techniques, standards, and data to industry, university, and government clientele.

The Standard Reference Data program provides scientists and engineers with critically evaluated physical, chemical, and materials property data needed for solving problems in research, development, and engineering design. Data evaluation centers located within NBS and in other institutions collect all reported measurements on materials and processes of interest. Chemical, physical, and engineering data are subjected to expert critical evaluation and analysis. When appropriate, models to predict the properties of substances that have not been measured are developed and the predictions tested with additional measurements. Compilations of data suitable for general industrial, scientific and engineering use are then produced. The Standard Reference Data program publishes about 5,000 pages of evaluated data annually, typically covering 40 to 50 different subjects. Computer readable databases are also being produced. The raw material for these tables and databases consists of the 30,000 or more original reports and research papers from all parts of the world that are collected and analyzed each year. This aggregate collection is also used to answer the hundreds of requests for specific data that are addressed to NBS every year.

The methodology for data evaluation and dissemination developed by this program can be applied to many classes of technical data required by other Federal agencies and industry groups. Thus other agencies call on NBS for assistance in preparing evaluated databases required for their own missions; in this way costly duplication of effort is avoided. NBS currently carries out reimbursable SRD work for the Department of Army, National Aeronautics and Space Administration, Department of Energy, and National Science Foundation. For example, NBS provides evaluated atomic data to the Department of Energy for use in fusion energy research and development.

The Standard Reference Materials program has produced, certified, and issued SRM's since 1906. SRM's provide benchmarks for calibration of instruments and measurement systems, and help industrialists and technologists make effective use of materials through improved quality control over the production of goods. They also help assure equity in buyer-seller transactions, and assure the long-term adequacy and integrity of the measurement process. In planning and producing SRM's, NBS draws upon the technical competence and measurement technology expertise developed in all STRS programs and relies on close interaction with U.S. industry for guidance. Production and administrative costs are recovered through the sale of more than 900 different SRM's including metals, glass, rubber, plastics, chemicals, nuclear materials and standards for evaluating the performance of computer and electronic systems. Operation of this program in fiscal year 1985 provided service to about 25,000 users in industry and state and local governments. These users purchased 40,518 units of SRM's, having a total value of $5,242,250.

In fiscal year 1987, $200,000 will be transferred to the NBS Working Capital Fund (WCF) to capitalize research and developmental costs associated with specific SRM's so that a larger part of the costs can be recovered through sales. This is in addition to the production and certification costs of SRM's that are currently capitalized and recovered through sales. The cost of SRM's will be raised to reflect the higher portion of capitalized research and development costs. Since an average production batch of SRM's results in a five-year inventory, the amount capitalized will not be entirely recovered through sales until the fifth year of sales, or seven years after the initial investment. Continued appropriations for transfer to the WCF through fiscal year 1988 will be required to complement sales income so that the level of capitalized research costs can be continued at $500,000 per year, as shown below.

(Dollars in thousands)

	1983	1984	1985	1986	1987	1988	1989
New Increment Transferred	$500	$500	$400	$300	$200	$100	...
Increase in Sales Revenue	...	...	100	200	300	400	$500
Total	500	500	500	500	500	500	500
Increment of Reduced Approp.	...	...	100	100	100	100	100

This transfer to the WCF results in a $100,000 decrease in requirements for appropriated funds for fiscal year 1987. By fiscal year 1989, the appropriation will have been reduced by a total of $500,000.

Planned accomplishments in fiscal year 1986 include the following:

- Complete certification and issue holmium oxide wavelength standard.
- Complete certification of pH and selected anions/cations in acid rain SRM.
- Complete measurement research and certification of a set of five particle standards for microdimensional metrology.
- Release a computer-readable database of evaluated infrared spectra for use in automated chemical identification using infrared spectrometers.
- Provide an ESCA database (electron scattering for chemical analysis), which will be used for characterization and analysis of material surfaces.
- Release database on steam properties.

Planned accomplishments in fiscal year 1987 include the following:

- Complete preparation and certification of rare earth oxide near IR wavelength SRM to serve as a reference point for the calibration of the infrared portion of the wavelength scale of spectrophotometers.
- Complete development and certification of drugs of abuse in urine SRM. This SRM will be used to improve the accuracy of measurement of drugs of abuse in urine, increasing the reliability of drug tests in employee testing and screening programs.
- Increase accessibility of technical data by preparing databases usable by scientists with personal computers.
- Build evaluated databases of performance properties of selected materials needed to improve product design and materials selection in industry.

Measurement Research and Standards
Reimbursable Program by Source of Support

	1985 Actual	1986 Estimate	1987 Estimate
	(Dollars in thousands)		
Other Agency Funding:			
Department of Defense			
Air Force	$5,178	$5,382	$5,654
Army	1,279	1,342	1,411
Navy	1,276	1,341	1,406
Other	373	392	410
Subtotal, Department of Defense	8,106	8,457	8,881
Department of Commerce	307	322	337
Department of Energy	5,004	5,254	5,517
Environmental Protection Agency	1,401	1,471	1,544
Department of Health and Human Services	475	499	524
National Science Foundation	274	138	302
National Aeronautics and Space Administration	1,442	1,514	1,589
Nuclear Regulatory Agency	385	404	424
Department of Transportation	120	126	132
Other	38	40	43
Total, Other Agency	17,552	18,225	19,293
Calibrations and Tests	1,941	2,037	2,139
Standard Reference Materials (SRM)	4,698	4,934	5,182
Technical and Advisory Services	1,876	1,971	2,070
Total, Reimbursable Program	26,067	27,167	28,684

Activity: Measurement and Engineering Research and Standards
Subactivity: Materials Science and Engineering

(Dollar amounts in thousands)

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Materials characterization	Appropriation....	108	$9,067	106	$8,571	109	$8,974	109	$8,974	...	...
		(111)	(8,188)	(110)	(8,665)	(113)		(113)	(8,977)	(...)	
	Reimbursements....	(38)	(2,564)	(39)	(2,692)			(40)	(2,826)		
Metallurgy and metals processing	Appropriation....	63	4,171	62	4,437	63	4,629	63	4,629	...	...
		(64)	(4,398)	(63)	(4,464)	(65)		(65)	(4,630)	(...)	
	Reimbursements....	(77)	(4,662)	(79)	(5,395)			(82)	(5,640)		
Polymer and ceramic science	Appropriation....	96	6,059	118	8,100	121	8,404	125	9,187	+4	+783
		(99)	(6,302)	(114)	(7,418)	(126)		(129)	(8,423)	(+3)	
	Reimbursements....	(80)	(5,061)	(83)	(5,315)			(85)	(5,580)		
Total requirements	Appropriation....	267	19,297	286	21,108	293	22,007	297	22,790	+4	+783
		(274)	(18,888)	(287)	(20,547)	(304)		(307)	(22,030)	(+3)	
	Reimbursements....	(195)	(12,287)	(201)	(13,402)			(207)	(14,046)		

NOTE: Appropriation amounts not in parenthesis represent permanent positions and budget authority. Appropriation and reimbursable amounts shown in parenthesis represent total work years and obligations. Reimbursable obligations for 1986 and 1987 represent best estimates of the funding levels.

Goals and Objectives

The goal of this subactivity is to provide the Nation with measurement methods, standards and data, fundamental to a more complete understanding of the processing, structure, properties, and performance of materials. This goal supports the DoC goals of (1) promoting the development and application of science and technology in U.S. industries and (2) making departmental laboratories available for proprietary research.

Objectives:

- o Develop the science base, measurement methods, reference standards, and data to characterize the processing, internal structure, composition, properties, and performance of metals, ceramics, polymers, glasses, and composites in order to improve industrial measurement and control of these materials during processing and to improve the predictions about the performance of such materials.
- o Develop the required underlying scientific concepts, measurement methods, measurement standards, measurement services, and procedures for improved nondestructive evaluation for process control in manufacturing and for detection and characterization of defects during in-service inspection.
- o Provide the scientific basis for greater efficiency and quality control in the production of existing materials and for the improvement of materials performance and durability.
- o Carry out generic materials science research related to the physical, chemical, and mechanical properties of metals, ceramics, glasses, polymers, and composites.

Base Program

Materials Characterization

This program provides for the development of more accurate characterization methods for the physical, chemical, compositional, and structural features of materials. Identification of significant compositional and structural features (including defects) enables the manufacturing process to create materials with desirable properties. Attaining the optimum microstructure results in materials with the required strength, toughness, magnetic or electrical properties; etc. The correlation of these properties with microstructure characterization depends upon innovative experimental techniques, and the development of successful quantitative theories of the mechanisms and kinetics of structural change. In this program, new methods are developed to characterize materials. Characterization methods include optical and electron microscopy, acoustic emission, ultrasonics, nuclear magnetic resonance, x-ray and infrared spectroscopy, and the wide range of capabilities available at the NBS reactor.

The NBS nuclear reactor, operated in this program, is a national research facility with unique capabilities for a wide variety of microstructural studies of metallic, ceramic, polymeric, and other advanced materials. Neutron diffraction, inelastic scattering, activation analysis and neutron radiographic capabilities are made available to industrial and academic researchers, Federal agencies, and other NBS programs. A cold neutron source provides intense beams of long wavelength neutrons that greatly expand the range of microstructural measurement and research. For example, this facility makes possible the study of crystallization dynamics or phase separation processes which are the key to the performance of new metallic glasses, polymer blends, and advanced ceramics.

Nondestructive evaluation (NDE) is a multi-disciplinary activity devoted to determining the quality of a part or an assembly without destroying or damaging it. The program draws upon a wide range of NBS measurement capabilities in order to develop the NDE measurement methodology that will improve production line process control and in-service inspection procedures. Examples of NDE techniques include: ultrasonic testing, thermal wave imaging, x-ray radiography, eddy current testing, penetrant diagnostics, and magnetic particle testing. Increased use of NDE will improve process control by avoiding production of defective components and further costly processing. NDE is also used extensively to detect incipient flaws and prevent catastrophic failure of structures such as aircraft, bridges, pipelines, and power plants.

Expertise in materials characterization made possible with state-of-the-art facilities at the NBS research reactor was used in the analysis of criminal artifacts, food and drugs, and environmental pollutants for the Federal Bureau of Investigation, Food and Drug Administration, and Environmental Protection Agency. Special expertise in neutron diffraction and small-angle neutron scattering (SANS) were developed and applied to studies of subsurface stresses in heavy metal alloys for penetrating armor applications by the Army and enzyme structure studies for the National Institutes of Health. Expertise developed in the Nondestructive Evaluation Program is being used to provide consulting services and review of the quality of x-ray radiographs used by Navy contractors in the manufacture of rocket motors.

Planned accomplishments in fiscal year 1986 include the following:

- Select and develop reference materials and measurement procedures for characterizing the fluorescence of liquid penetrant inspection media for determination of flaws.
- Design qualification procedures that can be used in field applications for verifying the performance capabilities of eddy-current measurement probes such as those used for process control in metal hardening and for inspection of superheater tubes in power plants.
- Propose American Society for Testing and Materials (ASTM) standard performance measures for infrared thermographic NDE apparatus.
- Complete neutron scattering measurements of critical properties of newly developed materials for low cost, high-efficiency permanent magnets which do not use strategic materials such as cobalt. These new magnets have application in electric motors.
- Use beams from the cold neutron source for real-time, small-angle scattering studies of phase separation in polymer blends, a process which controls properties of polymer blends.

Planned accomplishments in fiscal year 1987 include the following:

- Provide measurement methodology for applying thermal wave imaging to advanced ceramics, a powerful and emerging new nondestructive technique for characterizing surface and near-surface features of materials.
- Provide, cooperatively with industry and universities, intercomparisons of small-angle neutron scattering (SANS) measurements with ultrasonic measurements needed for the control of manufacturing processes of ceramic and metal parts made from powders.
- Provide a science base for the development of NDE sensors and heat flow models for temperature measurement in steel processing, cooperatively with the American Iron and Steel Institute.
- Provide intense cold neutron beams for the high temperature in-situ measurement of critical microstructures in turbine blade materials for advanced aircraft.
- Provide for the application of cold neutron small angle scattering to real-time studies of submicron densification of ceramics which is a key to process control.
- Complete a modernized low-angle detector system on the cold-neutron time-of-flight spectrometer to allow for the measurement of motions which determine macromolecular processes in chemical media.

Metallurgy and Metals Processing

This program supports generic technologies which promote the safe, efficient, and economical use of metals. Research in metallurgy deals primarily with the evaluation of microstructure and corresponding structure/property relationships in metals and alloys. It is a multi-disciplinary activity involving the physics of solids, solid state chemistry, and mechanics. The metallurgical engineering component of the program is concerned with the selection and use of metals and alloys based on their properties and performance. Studies in the area of properties research include fracture, deformation, mechanical behavior, corrosion and solidification processing. The correlation between structure and properties is emphasized. Performance characteristics of metals are identified, and predictive methods for maximizing performance and service lifetime are developed.

Metals processing research is aimed at providing the measurement methods, standards, and databases that will allow more rapid industrial adoption of innovative technologies and reduce processing costs in large segments of the metals industry. Advances in processing technologies will aid development of substitutes for scarce metals and reduce dependence upon unreliable foreign sources of alloy materials. Specific activities focus on the measurement, modification, and control of the structure and properties of metals made by the advanced processing techniques of rapid solidification and alloy coating. These methods are more efficient than existing technologies and are currently being developed by industry for specialized applications related primarily to defense and space needs. Alloy phase diagrams developed in this program provide graphic displays of the phases produced when two or more metals are combined. Phase diagram information allows prediction of the composition and properties of metal combinations under changing conditions and is instrumental in the efficient selection, use, and processing of alloys, including design of new alloys and the development of novel rapid solidification and alloy coating processes.

Metallurgical research expertise developed in the STRS program was employed in support of an American Iron and Steel Institute program to develop sensors for detecting porosity in hot steel ingots and measuring the internal temperature distribution in solidifying steel. This effort will provide the steel industry with the advanced measurement technology needed to improve manufacturing processes. NBS is also using its expertise to undertake a study of the electrodeposition of wear-resistance coatings for the Bureau of Engraving and Printing. These coatings will be used to develop durable, crack-free, electro-deposited chrominum engraving plates. In cooperation with the automotive industry, corrosion standard SRM's are being produced to assist that industry in assessing the corrosion resistance of electroplated parts. The properties of tank car materials and wheel alloys were measured for the Federal Railroad Administration in order to understand the causes of railroad accidents.

Planned accomplishments in fiscal year 1986 include the following:

- Design test methods and develop a scientific base in interfacial bonding necessary for electrodepositing metallic material on silicon carbide fibers. Such fibers can be used to produce advanced metal-matrix composite materials for high-technology applications in the aerospace industry.
- Design and test new models to predict effects of processing conditions on rapidly solidified alloys. This will allow control of alloy properties and development of new alloys not obtainable by conventional means.
- Develop thermodynamic and graphic techniques for ternary alloy phase diagrams as a part of the collaborative effort with the American Society for Metals.
- Develop an extension of the theory of elastic-plastic toughness, applicable to welds, from two dimensions (edge crack) to three dimensions (center crack) using numerical analysis and experimental methods.
- Develop an evaluation methodology and graphics for data on the corrosion of steels in acid media as an extension of the collaborative effort with the National Association of Corrosion Engineers.

Planned accomplishments in fiscal year 1987 include the following:

- o Provide an experimental and analytical procedure to measure the arrest and dynamic reinitiation of running cracks in structural materials.
- o Provide an analytical model of the elastic response of composite materials based on constitutive properties and processing history.
- o Provide an ultrasonic system that uses electromagnetic acoustic transducers (EMATS) for the evaluation of residual stresses in welded structures.
- o Provide a new acoustic emission technique for detection of failures at interfacial bonds in high technology materials. These failures are a major factor in limiting the reliability of these materials in aerospace applications.
- o Characterize processing conditions necessary to achieve a new metallic structure discovered at NBS and establish the physical properties of this structure. The structure may exhibit unusual properties with the potential for new applications.
- o Provide for the development of a computer database for the uniform corrosion of metallic and non-metallic materials in liquid environment. This is part of a collaborative effort with the National Association of Corrosion Engineers.

Polymer and Ceramic Science

This effort provides standards, measurement methods, and fundamental concepts needed by industry for improved processing and durability of polymeric and inorganic materials. The program focuses on the properties of ceramics, glasses, polymers, composites, and polymer blends, and on the mechanical, electrical, and optical performance of these materials.

The ceramics program focuses on the measurement science and data necessary to determine the interrelationships between structure, as evolved through the stages of ceramic processing, (from powder synthesis to finishing of the densified part) and long-term performance. The data, predictive models, methods and standards which result will provide U.S. industry with the scientific base and technical support in the manufacture of reliable high performance ceramics necessary to compete in world markets.

Research in the polymeric materials program addresses the science underlying the large, complex molecules which are responsible for the unique physical and chemical properties exhibited by plastics, synthetic rubber, and man-made fibers. Reliable measurements of the composition and chain-like structural arrangements of atoms are essential to the understanding of the unique physical and chemical properties exhibited by polymers. Material degradation mechanisms, such as delamination, wear, and fracture are investigated as part of the effort to control or retard those processes which limit the durability of these materials.

Expertise in the chemistry and mechanical properties of polymer-based printing inks aided the Treasury Department in quality control for the printing of paper currency. New data and theoretical developments in polymer blends provided a fundamental science basis to the Defense Advanced Research Projects Agency in developing programs on the design, processing, and performance of this new class of engineering materials. Polymer measurement expertise is helping the National Aeronautics and Space Administration set procurement specifications and establish quality control for heavy-life balloons used to carry research instruments into the stratosphere. Measurement facilites and expertise developed in the STRS program for ceramic materials were essential in providing the Department of Energy with critically needed data for the design of ceramic heat engines, heat exchangers and coal gasifiers. Environmental effects on the fracture of ceramics are being characterized in stress-bearing structural applications for use by the Navy.

Planned accomplishments in fiscal year 1986 include the following:

- Design a test methodology and instrumentation to measure friction, wear characteristics and materials properties of advanced ceramics at elevated temperatures and under simulated in-service environments in support of heat engine development by U.S. industries.
- Complete the evaluation of polystyrene solution phase diagram data jointly with the Society of Plastics Engineers.
- Develop measurement techniques for composites made of inflexible polymers.
- Complete the development of facilities necessary to: synthesize ceramics with controlled microstructures; measure relevant mechanical, wear and electrical properties; characterize performance-limiting defects during processing and the life cycle; and determine structural reliability at elevated temperatures.
- Complete the study of new low-temperature, chemical processes for electronic ceramic fabrication that avoid problems inherent in conventional high-temperature processing routes.

Planned accomplishments in fiscal year 1987 include the following:

- Measure the molecular structure of epoxy polymers through neutron scattering. These polymers are used to manufacture advanced composites.
- Complete research required for new polyethylene pipe and resin standard materials. These standards will enable the natural gas utility industry to improve the evaluation of these materials in gas pipelines.
- Develop micro-separation and spectroscopic techniques for characterizing ceramic and metallic surfaces important to innovative inorganic materials bioprocessing.
- Under the NBS-American Ceramic Society cooperative program, develop the first computerized database for critically evaluated oxide phase diagrams. This data provides the basis for the design of advanced ceramics.
- Develop laser-induced vaporization mass spectrometry as a novel tool for the evaluation of the ultrahigh temperature performance of ceramics in high intensity optical radiation environments.

Increase for 1987

	1987 Base		1987 Estimate		Inc. (+)/Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Polymer and ceramic science..................................	121 (126)	$8,404	125 (129)	$9,187	+4 (+3)	+$783

Polymer and Ceramic Science (Advanced Ceramics)

An increase of $783,000 and 4 positions is requested to continue the development of the critically needed measurement methods and standards, key data and predictive concepts required to assure reliable performance of advanced ceramics essential for competitive commercialization by U.S. industry. This request is a continuation of the fiscal year 1986 initiative which started this program with $2,217,000. With an additional $783,000 the advanced ceramics program will reach a steady state level of $3,000,000.

Advanced ceramics are a new generation of high-performance materials which have begun to provide the basis for sophisticated high technology applications in both new and established industries. Ceramics are inorganic, nonmetallic materials that are manufactured, usually at high temperatures, into end-use parts, devices and systems from abundant natural resources. The special properties attainable in advanced ceramics (such as high dielectric strength, and resistance to high temperature, corrosion and wear) make them the preferred, or only materials suitable for a broad range of high-performance uses in electronics, optics, structures, and advanced engine power trains. The current world market for advanced ceramics, principally in electronic and optical components, exceeds $4.3 billion, with rapid growth anticipated to sales of $19 billion by 1995. The U.S. share of this world market is declining; Japan now has a 50 percent share, and in some areas, such as semiconductor packaging, more than 70 percent. New markets in ceramic engines and turbine parts, cutting tools, and sensors represent a large potential leverage on the GNP.

The major technical barrier impeding competitive commercialization of advanced ceramics is the inability to produce components reliably. This lack of reliability stems from the sensitivity of ceramic performance to small microstructural defects (1 nanometer to 100 micrometers) introduced during the processing or life cycle. The interrelationships between these microstructural features and the processing variables that produced them are generally not understood; neither are the relationships between the microstructural properties and the resulting in-service performance and durability. The NBS program addresses these technical issues through a measurement-based program designed to understand, predict, and control the origin and fate of these performance-limiting features, and to establish those critical linkages between processing variables, microstructure, material properties and performance that will markedly improve ceramic reliability.

This program focuses on the measurement science and data necessary to determine the interrelationships between: structure as evolved through the stages of ceramic processing from powder synthesis to finishing of the densified part; mechanical and electrical properties as determined by the structural characteristics; and long-term performance. The data, predictive models, methods and standards which result will provide U.S. industry with the scientific base and technical support in the manufacture of high performance ceramics necessary to assure a competitive position in world markets.

Current cooperative programs with industry include: AVX Corporation (capacitors); Cummins Engine, Allison Turbine, and General Motors (heat engines); Bell Laboratories and Alpha Industries (dielectrics), and Hughes Aircraft (bearings). Those with universities include: MIT, Rutgers, Ohio State, Pennsylvania State, Northwestern, and Minnesota. In a cooperative program to develop a Phase Diagram Data Center for Ceramics, the American Ceramic Society is gathering resources from industry to improve dissemination of phase diagrams evaluated under NBS leadership. These interactions will be expanded to include industrial working groups, user facilities, workshops, government agency coordinating committees, as well as participative industrial research programs.

Planned accomplishments for fiscal year 1987 include the following:

- Develop measurement techniques for characterizing co-deposited optical films and relate the microstructural parameters to optical properties.
- Develop measurement facilities to determine dielectric properties of advanced electronic ceramic components and substrates so correlations can be made with characteristics of the starting powders and processing cycle.
- Determine relationship between mechanical flaws and electronic failure in ceramic substrates and capacitors.
- Establish micro-separation and advanced spectroscopy techniques to characterize ceramic powder surfaces for trace organics and correlate the results with the sintering behavior and performance.

The $783,000 requested for this initiative in fiscal years 1987 and 1988 includes $250,000 and $150,000, respectively, to be transferred to the NBS Working Capital Fund (WCF) for the purchase of equipment. In fiscal year 1989 the operating budget for this increment of the ceramic effort will reach a steady state level of $783,000.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Materials scientist	15	1	$52,262
Physicist	14	1	44,430
Materials scientist	13	1	37,599
Engineering technician	9	1	21,804
Total salaries		4	156,095
Less lapse		-1	-39,095
Total compensation		3	117,000
Personnel benefits			16,000
Travel and transportation of persons			21,000
Transportation of things			37,000
Communications, utilities, and other rent			9,000
Printing and reproduction			8,000
Other services			203,000
Supplies and materials			73,000
Equipment			49,000
Transfer to the working capital fund			250,000
Total			783,000

Materials Science and Engineering
Reimbursable Program by Source of Support

	1985 Actual	1986 Estimate	1987 Estimate
	(Dollars in thousands)		
Other Agency Funding:			
Department of Defense			
Air Force	$517	$543	$570
Army	612	643	675
Navy	2,205	2,315	2,431
Other	971	1,019	1,070
Subtotal, Department of Defense	4,305	4,520	4,746
Department of Justice	50	53	55
Department of Energy	1,910	2,006	2,106
General Services Administration	53	56	59
Department of Health and Human Services	945	992	1,041
Department of Interior	167	175	184
National Aeronautics and Space Administration	527	554	581
Nuclear Regulatory Agency	353	871	889
Department of Transportation	342	360	377
Department of Treasury	741	778	817
U.S. Postal Service	125	138	153
Other	1,406	1,469	1,534
Total, Other Agency	10,924	11,972	12,542
Standard Reference Materials (SRM)	398	417	439
Technical and Advisory Services	965	1,013	1,065
Total, Reimbursable Program	12,287	13,402	14,046

Activity: Measurement and Engineering Research and Standards
Subactivity: Engineering Measurements and Standards

(Dollar amounts in thousands)

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Electronic and electrical measurements	Appropriation....	171	11,278	168	10,577	173	11,215	181	12,165	+8	+950
		(176)	(11,356)	(174)	(10,763)	(178)		(182)	(11,805)	(+4)	
	Reimbursements....	(157)	(9,769)	(163)	(10,257)			(167)	(10,770)		
Chemical engineering metrology	Appropriation....	76	4,567	74	4,422	76	4,639	76	4,639	...	...
		(78)	(4,697)	(77)	(4,479)	(79)		(79)	(4,642)	(...)	
	Reimbursements....	(95)	(5,870)	(98)	(6,611)			(101)	(6,471)		
Mathematical sciences	Appropriation....	91	5,625	89	5,677	92	5,994	92	5,994	...	...
		(93)	(5,539)	(92)	(5,755)	(94)		(94)	(5,997)	(...)	
	Reimbursements....	(18)	(1,216)	(19)	(1,277)			(19)	(1,341)		
Manufacturing research and standards	Appropriation....	89	5,833	87	6,075	90	6,387	90	6,387	...	...
		(91)	(5,570)	(90)	(6,281)	(92)		(92)	(6,390)	(...)	
	Reimbursements....	(174)	(10,439)	(179)	(11,920)			(185)	(11,992)		
Building research	Appropriation....	62	$3,895	61	$3,895	41	$3,100	...	...	-41	-$3,100
		(63)	(3,953)	(62)	(3,922)	(46)		(...)		(-46)	
	Reimbursements....	(142)	(8,385)	(146)	(8,065)			(151)	($7,950)		
Fire research	Appropriation....	87	5,827	85	5,827	40	5,141	...	...	-40	-5,141
		(89)	(6,075)	(88)	(5,843)	(43)		(...)		(-43)	
	Reimbursements....	(37)	(2,288)	(38)	(3,082)			(39)	(2,523)		
Technical reimbursable services	Reimbursements....	(38)	(2,775)	(39)	(2,914)	—	—	(40)	(3,059)	—	—
Total requirements	Appropriation....	576	37,025	564	36,473	512	36,476	439	29,185	-73	-7,291
		(590)	(37,190)	(583)	(37,043)	(532)		(447)	(28,834)	(-85)	
	Reimbursements....	(661)	(40,742)	(682)	(44,126)			(702)	(44,106)		

NOTE: Appropriation amounts not in parenthesis represent permanent positions and budget authority. Appropriation and reimbursable amounts shown in parenthesis represent total work years and obligations. Reimbursable obligations for 1986 and 1987 represent best estimates of the funding levels.

Goals and Objectives

The goal of this subactivity is to promote the Nation's domestic commerce and international trade, economic growth, and technological advancement by providing measurement and standards-related services and physical property data to the Nation's technological community. This NBS goal contributes to the DoC goals by 1) promoting the development and application of science and technology in U.S. industries, and 2) making Departmental laboratories available for proprietary research.

Objectives:

- o Develop performance prediction techniques and measurement and test methods that will allow the U.S. building community to more effectively use computers and automation.
- o Provide the scientific and technical basis for efforts to reduce the Nation's fire losses and the cost of fire protection.
- o Provide generic measurement methods, measurement services, and national reference standards to support research, development, manufacture, equitable marketplace transactions, and entry into international markets for the Nation's high technology electronic materials, components, and systems.
- o Provide the underlying scientific basis and engineering measurement techniques, standards, key properties data, and predictive methods to enable the chemical and related industries to 1) calibrate their measurements relative to national standards for equitable exchange of goods in commerce and for reliable process control, and 2) efficiently design chemical processes and plants.
- o Provide and promote throughout NBS the use of effective statistics, numerical analysis, and scientific computing for planning and interpreting experiments and for analyzing quantitatively physical models and their performance.
- o Provide measurement methods, calibration standards, and a technical research base for interface standards to enable U.S. discrete parts industries to more rapidly develop and adopt automation and other advanced manufacturing technologies.
- o Provide technical support of programs such as the energy related activities of the Department of Energy (DOE), the operation of a Law Enforcement Standards Laboratory for the Department of Justice, and related programs for the Department of Transportation.

Base Program

Electronic and Electrical Measurements

This program provides generic measurement methods, measurement services, and national reference standards to support research, development, manufacture, equitable marketplace transactions, and entry into international markets for the Nation's high-technology electronic materials, components, and systems. Affected are over $200 billion per year of new electronic products for electrical power systems, satellite and earth-based microwave communications, optical fiber communications, navigation, defense, manufacturing, and computing.

Complex and highly needed measurement capabilities in key areas of national concern are addressed. Modern electrical power systems are moving to higher voltages, higher efficiencies, and higher stresses in electrical materials. New pulsed, electronic, and optical technologies are used in communications. Emerging high-performance earth-based and satellite communication systems must send data faster and require measurement capabilities for improved noise performance, more highly controlled antenna radiation patterns, and broadened frequency use. Semiconductor devices and integrated circuits require a high level of materials purity and greater dimensional control, especially for very large scale integrated circuits (VLSI). Further, all electronic systems are subject to a continuing threat of mutual interference from the rapidly growing use of electronic and electromagnetic systems and require sophisticated measurement methods covering wide frequency ranges, wide power levels, and continuous and impulsive radiation to determine the emissions from the systems and the susceptibility of those systems to interference.

Most of the electronics industry and all U.S. society are affected by benefits which are realized in the following ways. Economic growth is promoted by removing measurement-related barriers in industry and commerce through the provision of measurement methods and standards that enable sellers and buyers, including the U.S. Government, to agree on product specifications and performance. The program directly supports equity in commerce: for example, all revenue watthour meters used in metering $140 billion per year of electrical energy are traceable to standards developed by NBS. In addition U.S. exports are promoted by providing the measurement capability required to assure the entry of U.S. electronic products into international markets. For example, sophisticated measurements are necessary to assure that U.S. electronic products comply with international limitations on unwanted electromagnetic emissions. This program provides the technical basis for representation of U.S. interests in international bodies. Product quality and compatibility are promoted by providing measurement capability that is essential to the development of voluntary industry standards for such diverse products as very large scale integrated circuits, microwave components, and optical fibers. The program furthers productivity and innovation by providing a measurement base supportive of industrial research and development and advanced manufacturing processes. Measurement capability is provided for all electronic and electrical systems for continued performance assurance, maintenance, and military systems readiness.

The measurement expertise developed in this program with appropriated funds has enabled NBS to respond to the needs of other Government agencies and the private sector on a reimbursable basis. For example, during fiscal year 1985, this program provided measurement services to nearly all major high-technology companies and all Federal agencies employing advanced electronic systems. Representative organizations served include Department of Defense, National Aeronautics and Space Administration, Environmental Protection Agency, Federal Communications Commission, Department of Energy and national laboratories, plus communications, aerospace, electrical power, and semiconductor companies. With support from Sandia Laboratories and DOD, NBS developed broadband, isotropic field probes for measuring radio-frequency and microwave fields that can interfere with critical electronic equipment. Also with DOD support, NBS expanded the physical size of its near-field antenna measurement system to enable characterization of low sidelobe antennas required for advanced radar systems. Industry and Government rely on NBS special measurement expertise and neutral position to assure wide acceptance of measurement methods that affect the specification and marketplace evaluation of critical systems. With DOE support, NBS prepared a critical evaluation of key measurement methods for electric and magnetic fields in the vicinity of power lines. Based on this work, NBS contributed to the U.S. measurement standards of the Institute of Electrical and Electronics Engineers and to the proposed international standard now before the International Electrotechnical Commission. Additionally, Standard Reference Materials (SRM's) are developed and sold under this program to support the manufacture and sale of integrated circuits and superconducting materials.

Planned accomplishments in fiscal year 1986 include the following:

- Develop a combined voltage and current source with high accuracy and broad bandwidth to support a new generation of precision electronic watthour meters. These meters will reduce the inaccuracy of current measurements and provide the basis for improved equity in the sale of electric energy.
- Develop a microwave noise measurement capability for 4 to 8 gigahertz. This capability will support the development, evaluation, and sale of high-performance receivers and amplifiers for commercial and Government satellite communications systems operating in this heavily used microwave region.
- Develop measurement methods for maximum operating frequency and spot size (for coupling compatibility) for single-mode optical fibers. These measurements will support the development, characterization, and equitable sale of the most important new medium for long-distance communications.
- Design new test structures for use in evaluating the quality of the interconnections among the several layers within VLSI circuits. These test structures will serve manufacturers and buyers of integrated circuits in assuring product quality through better assessment of the combined effects of design, fabrication processes, and process equipment.

Planned accomplishments in fiscal year 1987 include the following:

- o Develop an automated high-accuracy calibration service for electric power and energy, based on the combined voltage and current source developed in fiscal year 1986. This new service will improve equity in the metering of $140 billion of electric energy annually.
- o Conduct an international intercomparison of measurements of the gain and polarization properties of microwave antennas at 8-12 gigahertz. International agreement on microwave measurements supports the sale of U.S. products abroad.
- o Develop the theory and probes for separate measurement of the average value of continuous-wave, single-frequency electric and magnetic fields for 10-18 gigahertz. This capability supports identification of electromagnetic interference that causes malfunctions in electronic systems.
- o Design a gallium-arsenide test chip to evaluate the performance of test structures for determining parameters of gallium-arsenide processes and circuits. This work supports the development of high-speed integrated circuits and their evaluation in the marketplace.

Chemical Engineering Metrology

This program provides the underlying scientific basis and engineering measurement techniques, standards, key properties data, and predictive methods to enable the chemical and related industries to 1) calibrate their measurements relative to national standards for equitable exchange of goods in commerce and reliable process control, and 2) efficiently design processes and plants.

This program develops accurate measurement techniques, traceable to NBS standards, for flow rate, volume, density, and humidity. These techniques are used by U.S. industries (e.g., chemical, petroleum, utilities, beverage, etc.) and state governments to assure that goods transferred in commerce are accurately measured. Concurrently, this program develops transfer standards, enabling industry to calibrate their instruments in the field and assure: 1) accurate control of diverse manufacturing processes that use liquids and gases, and 2) equity in exchange of fluid products. Emphasis is placed on the development of new measurement techniques for complex multiphase multicomponent fluid flows, and on other critical process measurements such as composition, temperature, viscosity, pH, and density of the flow stream. This program is supported by the complementary development of essential thermophysical properties data and predictive models that extend the useful range of these data beyond the measured data points. The chemical industry uses these data for equitable exchange of goods, efficient process and plant design, and quality control in manufacturing. Improved methods of predicting heat and mass transfer in chemical reactions are also being developed. These results are essential to support the U.S. industrial trend toward 1) production of higher value added specialty chemicals, 2) processing of biochemicals, 3) production of chemicals and components for the microelectronics industry, and 4) use of new feedstocks derived from the heavier fractions of crude oils and solids such as coal and biomass.

The U.S. chemical processing industry has annual sales exceeding $180 billion and has a positive balance of trade. However, in 1984 the U.S. chemical trade surplus declined for the fourth consecutive year to $8.6 billion, 29 percent below the record high of $12.1 billion in 1980. This sector of U.S. industry spends about 8 percent of its annual gross sales on capital investments. The improved measurements, data, and predictive techniques provided by this program will enable industry to reduce capital costs for new equipment and plants, save raw materials and reduce product energy requirements for new and existing plants, reduce waste products and environmental pollution, and provide improved equity in the marketplace. Industry estimates that savings in excess of $7 billion per year would result from the provision of an adequate generic database for thermophysical properties. While the total savings are high, the savings for any one company are not large enough to justify industry's investment in developing these data. An example is the universal need by industry for reliable transport properties and density data for a broad range of fluid mixtures. These data are used to design chemical processing equipment. NBS has developed an interactive computer program to predict the needed properties for multi-component mixtures, with constituents of nearly 100 inorganic and hydrocarbon compounds, over a wide range of temperatures, pressures, and compositions. The predicted properties have been tested against available experimental data, and the computer program is now in use by numerous industrial firms.

The basic scientific capabilities developed under this STRS program enable NBS to provide reimbursable services to other Government agencies and the private sector. For example, calibrations of commercial instruments are provided at cost to the chemical and related industries and state governments to assure reliable measurement of volume, density, humidity, and flowrates for liquids and gases. Financial support from the Gas Research Institute (GRI) and the American Petroleum Institute (API) enabled NBS to develop improved measurement methods and data for metering the flow of natural gas and oil through pipelines. These data and methods will be used by the private sector in formulating voluntary national and international standards for commercial exchange of industrial gases, natural gases and liquid petroleum products. Current uncertainties, approximately $2 billion per year, in the exchange of these products could be reduced by a factor of two with improved metering codes. GRI and API requested NBS services to assure traceability of measurements to national standards. A consortium, including thirteen private firms, funded the NBS development of a computer model to predict phase equilibria properties of fluid mixtures containing carbon dioxide near its thermodynamic critical point. This consortium was organized by NBS to make its unique expertise available to the private sector to meet an urgent industrial need. The importance of this work lies in the potential use of carbon dioxide as a supercritical solvent in energy (e.g., oil recovery processes), food (e.g., coffee and tea decaffeination) and cost-efficient chemical separation techniques. These data will be used by industry for process design and commercial exchange of carbon dioxide via interstate pipelines. Other examples of reimbursable services include: providing NASA with a database for adaptation of vortex-shedding meter principles to accurate measurement of oxygen and hydrogen fluid flows in the NASA space shuttle engine; providing NASA with metals combustion data for several metal alloys reacting with high pressure oxygen to improve safety in handling oxygen in aerospace systems--these data will be equally useful to the industrial gas processing industry; providing DoE with data and engineering expertise to enable development of targets for use in inertial confinement fusion research; and providing DoE with new techniques for optical measurement of composition and temperature in reactors used to generate steam or electrical power, thereby enabling improvement in efficiency of power generation.

Planned accomplishments in fiscal year 1986 include the following:

o Complete and publish uncertainty statements for volume, liquid density, fluid flow, airspeed, and humidity measurement facilities. As a result of upgrading and automation, the measurement uncertainties in several of these areas will be decreased by a factor of two.

o Provide proven criteria (based on benchmark measurements and models) to facilitate scale-up of advanced chemical subprocesses involving mass transfer and product separations over a wide range of industrial applications. This will enable much more reliable scale-up from laboratory to plant processing equipment.

o Develop theoretical methods to predict solubility enhancement of industrially important solvents that are candidates for use in supercritical extraction. This will allow industry to choose optimal process fluids and conditions for this energy efficient method of separating chemical species without extensive experimental testing.

o Develop an experimental system to accurately measure heat transport in heterogeneous materials used as thermal insulators for industrial equipment operating at temperatures up to 800°K. Resulting data will establish the basis for modeling heat transport which will make higher operating efficiencies and lower material costs possible.

o Publish data correlations, based on theoretical models and experimental measurements, to predict drop size distributions in liquid-liquid contacting operations, typical of those encountered in static and/or stirred tank mixers. This model will provide the capability for prediction of mixing tank performance over a wide range of industrial conditions.

Planned accomplishments in fiscal year 1987 include the following:

- Develop experimentally verified mathematical models to predict heat transfer to and from supercritical fluids carrying solutes which are important in industrial applications. Data are needed for design and operation of supercritical solvent separation/purification techniques to improve the efficiency and economy of product recovery in the processing of fuels, chemicals, foods, drugs, etc.
- Develop and experimentally verify a theoretical model to predict the thermodynamic properties of fluids with many dispersed chemical species. Such models are needed for commercial exchange of industrial fuels and chemicals, and for efficient design and operation of chemical processing plants.
- Develop the capability to accurately measure humidity levels below one part per million in air and selected common gases. These measurements will lead to an expanded calibration service in humidity which will provide better quality control for manufacturers of microelectronics and pure medical gases.
- Determine the microscopic properties of thin fluid films through theoretical models validated by state-of-the-art optical measurements. This work provides new concepts, benchmark data and interpretive models for use in manufacturing detergents and adhesives, understanding flow through porous media (such as oil through rocks and fluids through biomembranes), and for the development of new composite structural materials.

Mathematical Sciences

This program ensures that the most appropriate statistics, numerical analysis, and scientific computing procedures are available for use in NBS technical programs. This program develops widely used mathematical methods in such areas as: mathematical modeling, nonlinear mathematics, computational techniques, graphics for analysis of complex data, symbolic manipulation and nonnumerical processing, discrete mathematical models, linear programming, network optimization, statistical experiment design, statistical methods, statistical modeling, time series analysis, and statistical control of measurement processes. In addition, this program provides advice and assistance to scientists and engineers at NBS by acquiring, adapting, developing, testing, evaluating, and documenting scientific computing software packages and assisting in their use in NBS research programs.

The Mathematical Sciences program has substantial impact on both the efficiency and productivity of all NBS programs as well as the quality of their output. This is achieved by making available mathematical tools which are common to the needs of different NBS programs and by collaborating with NBS physical scientists and engineers in applying specialized mathematical techniques, thereby increasing their technical productivity. Readily accessible mathematical and computing assistance enables bench scientists to focus more fully on their own specialties. NBS mathematicians, maintaining an understanding of the Bureau's work, can apply techniques at the forefront of mathematical research that most effectively serve the needs of individual programs. In addition, direct involvement with Bureau programs allows NBS mathematicians and statisticians to recognize needs common to many application areas and to develop or adapt tools or methods to meet these needs.

The basic mathematical capabilities developed under this STRS program also enable NBS to provide reimbursable services to industry and other government agencies. For example, this program's expertise in mathematical analysis was drawn upon to support the Army Corps of Engineers Topographic Laboratories. Specifically, innovative computer-based methods for the triangulation of very large planar point sets were developed for the effective generation of accurate terrain surface maps from contour information. In addition, this program's expertise in mathematical modeling of physical systems and computer graphics contributes to a joint NASA/NBS program to study the effects of time-dependent gravitational variations of importance to microgravity experiments in orbiting spacecraft.

Planned accomplishments in fiscal year 1986 include the following:

- Develop and apply a new method of solving inverse problems of partial differential equations. The solution method provides the design basis for the pulse generating circuit of an ultrasonic test probe for nondestructive examination of metal specimens. The same method is used to analyze electronic high-voltage pulses and to understand pulse methods of testing optical-fiber quality.
- Develop vector and parallel processing algorithms for simulating thermophysical phase transitions. The complex structure of these models leads to larger problems requiring the largest, fastest computer techniques available. With these techniques, a new level of detail is possible in understanding liquid-to-solid transitions important in such areas as chemical processing.
- Develop and apply interactive graphics programs for the solution of difficult non-linear problems encountered in precision electrical measurement, the orbits of time-relay satellites, and the design of high-energy particle accelerators.

Planned accomplishments in fiscal year 1987 include the following:

- Apply techniques of supercomputer calculation to the mathematical modeling of thermal convection flow in gases, and to rapid diffusive solidification of alloys. These techniques offer great speed and realism in such theoretical models of fluid flow.
- Apply 3-D color computer-graphics techniques and computational geometry algorithms to physical structure problems, such as the ordering of newly discovered icosahedral crystals and behavior of solids and liquids at the sites of defects and impurities. This analytic and graphic capability will accelerate theoretical understanding of the structure of materials through visualization and communication of their significant properties.
- Develop and apply advanced techniques of database construction to be used in the joint American Society of Metals/NBS alloy-physics phase-diagram library which permits easy updating, access, and maintenance by users. These techniques facilitate collaboration among metallurgists in producing and evaluating phase-diagram data.
- Develop statistical models and optimal experimental designs for electrically non-linear automatic test equipment systems. This work will provide a theoretical basis for describing, modeling, and calibrating complex electrical components, circuits, and subassemblies.
- Provide statistical support for the evaluation of semiconductor measurement methods including ellipsometry, transient capacitance techniques for characterizing deep levels, and optical microscopy for linewidth measurements on integrated circuit wafers. These measurement techniques will be applied in certification of SRM's.

Manufacturing Research and Standards

This program provides measurement methods, calibration standards, and a technical research base for interface standards to enable U.S. discrete parts industries to more rapidly develop and adopt automation and other advanced manufacturing technologies. Scientific and technical activities focus on precision manufacturing of mechanical parts, automated manufacturing, and robotics. Full-scale, real-time testing of many of the theories and concepts developed in this program are conducted at the NBS Automated Manufacturing Research Facility (AMRF).

In the precision manufacturing area measurement methods and standards for the units of length for derived quantities such as force and acceleration are developed to fulfill the requirements of automated, manned or combined man-machine modes of manufacturing. The state-of-the-art of length and force metrology is advanced through fundamental research and calibration activities in areas such as electron microscopy, force measuring transducers, machine tool errors, and surface finishing of machined parts.

The automated manufacturing program develops measurement procedures and the technical basis for standards that will enable equipment from various manufacturers to be connected in a fully automated manufacturing system to make discrete parts whose dimensions are correct to the required accuracy. The technical basis for interface standards provided by NBS enables the voluntary standards community to design these interfaces and protocols and protects the proprietary software and hardware interest of equipment manufacturers. Measurement standards are needed to achieve dimensional accuracy in an automated environment through deterministic metrology, that is, measurements made during the production process which will enable manufacturers to make discrete parts to the correct dimension or shape without having to make separate, time-consuming and expensive measurements. In robotics, as well as automated manufacturing, research activities include work in artificial intelligence, hierarchical control theory, manufacturing data management, control systems architectures, robot sensors, quality control and software engineering.

This program directly influences the entire discrete parts manufacturing industry which in turn affects a major segment of the entire economy. Seventy-five percent of U.S. manufactured goods in trade, (including aircraft components, auto parts, heavy equipment and machine tools) representing $150 billion in value added to the Gross National Product, are produced by this sector of the U.S. economy. Major industrial nations including Japan and Germany have national programs in automated manufacturing. Automation of this domestic industry is critical to achieving international competitiveness and requires the development of interface standards and the achievement of deterministic metrology which this program addresses. Successful and timely development by the U.S. of this manufacturing technology will provide the means to compete internationally and to mobilize rapidly in time of national emergency.

The technical capability developed under this program has enabled NBS to respond to requests to provide specialized services to other agencies and the private sector on a reimbursable basis. Most notable has been the Navy's support of NBS's research on automated manufacturing, particularly development of the AMRF. The Navy foresees a number of benefits resulting from their research support such as reduced lead time for production of Navy parts, reduced costs for small lot sizes, improved quality and reduced rework, improved transportability of manufacturing processes to alternative equipment, and improved industrial preparedness. In fiscal year 1985, we also began working with a number of Navy and Navy contractor activities to move the NBS-developed AMRF technology into use in the field.

In addition to the Navy, a number of other agencies have been provided services. At the request of Lawrence Livermore National Laboratory (LLNL), NBS developed the ultra-high accuracy noncontacting, measuring system and detailed test procedure for determining the performance of diamond point turning machines. This test procedure was field validated in fiscal year 1985. At the request of the Army, NBS integrated its real-time robot control system into the Army's field material handling robotics testbed program, permitting high-speed sensor driven robotic acquisition of ammunition. This program also performs calibrations to tie the properties of its products to international standards of length and force, and to national standards of physical qualities such as shape, acoustical power, and surface finish. NBS was requested to perform this work because no private source could offer measurements of such high accuracy or traceability to national standards.

Planned accomplishments in fiscal year 1986 include the following:

- o Demonstrate feasibility of a dynamic force measurement system, thereby extending the capability of NBS to provide measurement services to meet industry's needs.
- o Operate the AMRF with all seven work stations (five machining and inspection work stations plus materials handling and inventory management) under central control to demonstrate the manufacturing of parts from seven preselected part families.
- o Demonstrate computer-integrated process planning, data preparation, data administration, communications, and real-time execution system in a manufacturing environment.
- o Develop draft standards for specifying the dimensional accuracy of computer-controlled machine tools and for communication of standardized data about mechanical parts among all components of a computer integrated manufacturing system.

Planned accomplishments in fiscal year 1987 include the following:

- Demonstrate a method for measuring the stress below the surface of a diamond-turned part due to the machining process. This technique will allow an understanding of the relationship of manufacturing processes to part performance, as in laser mirrors and computer memory disks.
- Develop laser tracking system to measure the position and orientation of a moving robot arm to an accuracy of one-thousandth of an inch. This system will allow characterization of the dynamic performance of industrial robots by a standard test method.
- Implement a resource plan developed jointly with NBS, industry, universities, and other government agencies for operation and continued evolution of the AMRF as a national facility.
- Test in the AMRF a Product Data Exchange Specification (PDES) format for geometric part data used, for example, in process planning, robot control, and transmittal outside the manufacturing system.

Building Research

This research produces performance prediction techniques, compatibility criteria for complex computer programs, and measurement and test methods that will allow the U.S. building community to more effectively use computers and automation in order to improve construction services and products, reduce losses from structural failures, and reduce consumption of natural resources.

NBS continues to provide basic measurement and test method support to the building industry, focusing on the development of advanced methods for data analysis and automation. These methods have the potential to improve the performance of constructed facilities and to increase productivity in construction. Severe technical and marketplace barriers impede the effective use of advanced technologies to improve buildings and building practices. For example, the disaggregated nature of the construction industry means that a new team of owners, designers, manufacturers, and contractors is assembled for each construction project. This research will produce reliable performance prediction techniques, compatibility criteria for complex computer programs, and measurement and test methods to permit the construction industry to take advantage of computers and automation in the design, construction, and operation of facilities.

This program carries out the following activities: (1) develops performance prediction methods fitted to the requirements of computer-aided design to provide reliable assessments of the function, economy and safety of alternative systems, components, and materials; (2) develops "smart" measurement techniques using dedicated microcomputers to provide quality assurance at the construction site, assess the properties of existing facilities, and provide information for effective control of building operations; (3) develops compatibility criteria for computer-aided design and construction programs to permit automated, reliable, and economical information exchange among the diverse computational capabilities of construction team members; (4) develops concepts and principles for building standards and expert systems to support timely, reliable decisions for design, construction and operation of constructed facilities; (5) develops techniques to measure loads and the corresponding responses of buildings; (6) develops probability-based methods for predicting the service life of important building materials; (7) develops methods to characterize the response of structures under earthquake loadings; and (8) conducts investigations of major structural failures to define the technical causes and widely disseminates the findings.

NBS has cooperative agreements with industry, the National Conference of States on Building Codes and Standards, and the National Institute of Building Sciences to identify research needs, give guidance to current NBS research, and to help implement NBS research results. NBS participates in technical activities of trade associations, professional societies, and standards organizations to define research objectives and to transfer research results. The program conducts cooperative research with universities, such as the Architectural and Engineering Performance Information Center of the University of Maryland, Carnegie-Mellon University, and the University of Illinois.

The NBS expertise in predicting, measuring and testing the performance of building materials, components, systems and practices produces great demands for technical support of the building-related programs of other Federal and private sector organizations. At the request of the President's Office of Science and Technology Policy, with funding from the Federal Emergency Management Agency and the National Science Foundation, NBS has initiated a design study for the National Earthquake Engineering Experimental Facility. The facility would provide the data and understanding necessary for rapid improvements in the design and construction of earthquake resistant structures. Based on NBS research sponsored by the National Association of Home Builders and the Department of Housing and Urban Development, changes were approved in the plumbing provisions of the One and Two Family Dwelling Code of the Council of American Building Officials. The National Association of Home Builders estimates savings of $500 per home, or $500 million per year, when the code is adopted by regulatory jurisdictions where one million homes are constructed annually. At the request of the Consumer Products Safety Commission and the Environmental Protection Agency, NBS is evaluating the accuracy of models for predicting the formaldehyde concentrations in air in buildings as a function of the properties of formaldehyde-emitting building materials and furnishings. Results will provide sound technical bases for selection of materials consistent with adequate indoor air quality.

Planned accomplishments in fiscal year 1986 include the following:

- Develop nondestructive test methods to evaluate the quality of concrete in-place. Methods for detecting internal flaws such as cracks and honeycombing will reduce structural repair costs and improve the safety of concrete structures.
- Develop a preliminary protocol for interchanging building descriptive data between computer-aided design (CAD) systems. This protocol will provide the technical basis for extending the current Initial Graphics Specification (IGES) to meet the needs of the building industry.
- Demonstrate a pilot knowledge-based expert system that can assist in the selection of constituents for and production of a more durable concrete subjected to a variety of field service conditions. This system will make accessible the specialized factual and empirical knowledge possessed by materials scientists and engineers.
- Develop and validate a stochastic model for predicting the in-service performance of single-ply roofing membranes with seams. The model will lead to improved methods for evaluating the new generation of materials for low slope roofing systems.

Direct Federal funding for this program is proposed for elimination in fiscal year 1987 to encourage the transfer of Building Research to state and local government and the private sector. This transfer is further elaborated on in the decrease section of this subactivity.

Fire Research

This program provides the scientific and technical basis for efforts to reduce the Nation's fire losses and the cost of fire protection. The program develops the technical basis for improved practices for fire hazard assessment, prediction, and reduction. This capability to assess and predict fire hazards will: a) facilitate reduction of the loss of life caused by smoke and toxic gases from fire; b) permit introduction of more cost-effective fire protection technologies and improved materials and products by product developers and standards and code officials; and c) enable quantitative fire safety evaluation of buildings, vehicles, and facilities by designers, architects and fire protection engineers.

This program is leading a major transition within the fire protection community from dependence on traditional and largely intuitive practices, such as costly "burn to learn" methods, to the use of scientifically-based fire prediction and simulation tools (e.g., models) developed by NBS as a complement to expert judgment. The leaders in the fire protection field are participating with NBS in this transition, including testing laboratories, product and material developers, and fire protection and engineering organizations.

Some specific activities of this program are: 1) the development of practical computational procedures, simple models and computer programs derived from scientific understanding of fire growth and smoke spread for use by product developers, fire protection engineers, building designers and architects, and code officials; 2) the development of practical procedures for assessing and measuring the toxic hazard of smoke; and 3) research and development of test methods that address the critical determinants of rapid flame spread and fire growth.

The NBS Fire Research Center is one of three closely coordinated activities created by the Federal Fire Prevention and Control Act of 1974 (P.L. 93-498). NBS provides the broad range of basic research needed to reduce this Nation's fire losses. The other two activities are carried out by the United States Fire Administration and the National Fire Academy in the Federal Emergency Management Agency. NBS fire research is coordinated with private sector organizations such as the National Fire Protection Association and others in the fire protection community. It provides support for an integrated grants program which is comprised of 25-30 annually funded grants at universities and other private institutions. This complementary activity ensures the use of the best available scientists for fundamental fire research and for educating future fire safety scientists.

The capability developed under this program has enabled NBS to respond to special requests from other government agencies and the private sector on a reimbursable basis. NBS established new code-type safety criteria for modern airtight wood burning appliances for the Consumer Product Safety Commission (CPSC) (20% of house fires are caused by supplemental heating). A method was developed and successfully tested by NBS to quickly extinguish blowout fires on offshore oil well platforms for the Department of Interior. Smoke travel was quantitatively determined for an actual Navy ship using a detailed (1/20) scale model and a water flow visualization technique. Toxicity research for other agencies included critical literature searches on various plastics for CPSC. Research on smoke production from large fires has commenced in order to address the issue of "nuclear winter" for the Defense Nuclear Agency.

Planned accomplishments in fiscal year 1986 include the following:

- o Catalog subroutines and algorithms which characterize elemental processes of compartment fire growth. This will facilitate the development of an improved compartment fire growth model.
- o Develop a preliminary model for predicting key chemical species in the nucleation of soot particles which decrease visibility and emit radiation in a fire. Understanding and controlling soot formation could open new approaches to improving fire safety.
- o Determine the validity of using only pure gases, prime toxicants, as a measure of a material's combustion product toxicity. The use of pure gases to predict toxicity would permit rapid and inexpensive assessments.
- o Conduct research programs with three organizations in the CFR fire simulation laboratory. A major use of the simulation laboratory is the transfer of engineering technology such as fire models.

Direct Federal funding for this program is proposed for elimination in fiscal year 1987 to encourage the transfer of Fire Research to state and local government and the private sector. This transfer is further elaborated on in the decrease section of this subactivity.

Technical Reimbursable Services

This program is totally supported by reimbursements and includes funding for the NBS Office of Energy-Related Inventions (OERI) and the NBS Law Enforcement Standards Laboratory (LESL). OERI was established within NBS under the terms of Section 14 of the Federal Nonnuclear Energy Research and Development Act of 1974. OERI, which receives all of its funds from DOE, is responsible for evaluation of energy-related inventions, particularly those submitted by individual inventors and small companies. OERI is also responsible for outreach activities aimed at bringing the program to the attention of inventors and small businesses. The evaluations, which are performed by NBS staff and outside consultants, are based on three general criteria: technical feasibility, potential energy conservation or supply impact, and commercial feasibility. Inventors are notified of the results of the evaluation in each case. Worthwhile inventions are recommended to DOE for funding which averages about $70 thousand per invention.

The primary mission of LESL is to develop performance standards to assist state and local governments in the cost-effective procurement of equipment suitable for the needs of law enforcement agencies. Specific activities in FY 1987 will include the development of standards for communications equipment such as new types of police radio, research to evaluate the effectiveness of handgun and shotgun ammunition, and the police application of personal computers. In addition, LESL will assist the National Institute of Justice (NIJ) in the testing of police equipment to be accomplished by independent testing laboratories. Funding for these activities is provided by the Departments of Justice and Transportation. These agencies rely on the scientific and engineering expertise of NBS to address problems of the criminal justice system and public safety.

A number of accomplishments were recently achieved in this program. For example, the Office of Energy-Related Inventions (OERI) provided approximately 1,200 evaluation reports to inventors in fiscal year 1985 of which 50 inventions were recommended to DOE for financial support. These 50 inventions cover a wide range of subject areas. Included is a novel type of graphite fiber that could be used to make more fatigue resistant composites, a cooker for fast-food restaurants, two coal combustion processes, and a new type of solar cell. Inventions recommended in previous years continue to progress toward commercialization. At least three became commercially available in 1985, one was selected for a coal desulfurization demonstration plant, and one showed significant fuel savings for agricultural tractors in field tests. OERI also sponsored six regional innovation workshops. The Law Enforcement Standards Laboratory (LESL) continued to provide support to the National Institute of Justice (NIJ) in their implementation of voluntary national standards. LESL assisted NIJ in the establishment of the Technology Assessment Program Information Center (TAPIC) operated by a grantee through a cooperative part of the NIJ consumer report series. Other representative accomplishments include the development of a test method for the evaluation of high security glazing, the measurement of mobile antenna performance, a performance standard for police shotguns, and six additional reports and guidelines in the fields of communication systems, protective equipment and arson investigation for publication by NIJ. The Department of Transportation also promulgated voluntary model specifications for evidential breath testers and calibration units developed by LESL.

Increases/Decreases for 1987

	1987 Base		1987 Estimate		Inc. (+)/Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Electronic and electrical measurements.......	173 (178)	11,215	181 (182)	$12,165	+8 (+4)	+950
Building research...........................	41 (46)	$3,100	... (...)	...	-41 (-46)	-$3,100
Fire research...............................	40 (43)	5,141	... (...)	...	-40 (-43)	-5,141
Total......................................	254 (267)	19,456	181 (182)	12,165	-73 (-85)	-7,291

Electronic and Electrical Measurements (Fiber-optics)

An increase of $950,000 and 8 positions is requested to enable NBS to provide measurement technology and services for components which constitute modern communications and computer systems. This will support industrial development of advanced lightwave systems and will provide U.S. industry with the means to ensure international competitiveness in this newly emerging technology. Additionally, activities NBS currently conducts involving the characterization of the effects of non-ionizing radiation and low temperature instrumentation will be refocused toward the fiber-optics program and will therefore augment this program at a level of $750,000 and 8 positions.

Lightwave technology is the basis for a new industry, often termed optical fiber communications, which uses light and hair-thin glass filaments (optical fibers) rather than electricity and copper wire to sense, process, and transmit information. It is currently undergoing rapid international growth because of the advantages of the new technology and recent advances which have enabled its commercialization. The current world market for fiber-optics exceeds $1 billion per year and is growing at a rate in excess of 30% per year.

The advantages of lightwave communication systems, compared to the best copper wire systems, are that they currently offer 250 to 1,000 times the information capacity, require one-tenth to one-hundredth the space, and cost one-fifth as much, while providing greater freedom from electrical interference and greater security against unwanted interception. This latter attribute is particularly important for national security applications. Today's optical fibers could carry more than 100 times the information they carry now. The exploitation of the full potential of lightwave communication systems is limited by the terminal equipment which transmits and receives the lightwave signals. Advances in the technology which allow substantially greater exploitation of this capability have been demonstrated in the laboratory, but require further engineering development to deliver products to the marketplace.

The core components of the lightwave communication industry, laser diodes and optical fibers, were invented in the U.S. However, many industrial representatives concede that in several key areas we are now losing this innovative lead because of rapidly growing international competition. Japan and several European countries are moving ahead in production and deployment of the technologies at such a rate that U.S. industry must take aggressive action.

To compete successfully, U.S. industries must deliver technically advanced, cost-effective components and systems and prove their performance and compatibility in the marketplace. For example, laser diode production yields, which are now less than 10 percent, and laser diode performance must be improved. New terminal equipment must be developed and brought to the market to more fully exploit the information-carrying capabilities of optical fibers.

NBS will concentrate its efforts on providing selected measurement technology and services for the components which constitute lightwave systems. The major classes of components comprising lightwave systems include light sources, detectors, waveguides, modulators, demodulators, amplifiers, switches, etc. U.S. industry's development of each of these devices and the systems arising from them will require many entirely new characterization and performance measurements of a generic nature for components and associated materials. Specifically, NBS will develop scientific data, generic measurement methods, and physical standards for defining component performance, focusing first on sources, detectors, and waveguides.

NBS work will provide the test methods and data needed to diagnose certain problems that are currently limiting component performance and develop essential data and monitoring methods for fabrication processes and equipment to improve reproducibility and improve production yields. In combination, the new measurement methods and scientific data will assist industry to speed development of capabilities to exploit this burgeoning technology and to develop well-formulated specifications and standards needed to compete successfully in the international marketplace.

Planned accomplishments in fiscal year 1987 include the following:

- Begin development of models for describing scattering in passive optical components such as waveguides. Scattering is a major limitation to improved rates of data transfer in optical processing and transmission systems.
- Prepare test samples required for the development of methods for measuring attenuation in planar waveguide components. Measurement of these parameters is needed for the design and characterization of components for optical communications.
- Complete first stage of development of measurement methods for characterizing the beam-profile output of laser diodes. These measurements are needed to determine the efficiency of coupling the light output of the laser diodes into optical fibers and planar waveguide structures.
- Measure a first noise characteristic essential for modeling noise mechanisms in laser diodes. Noise fluctuations in light sources are one of the fundamental limitations on the spacing of repeaters in fiber optic communications links.

The $950,000 requested for this initiative in fiscal years 1988 and 1989 includes $340,000 and $230,000, respectively, to be transferred to the NBS Working Capital Fund (WCF) for the purchase of equipment. In fiscal year 1990, the operating budget for this effort will reach a steady state level of $950,000.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Supervisory physicist	15	1	$52,262
Physicist	14	1	44,430
Electronics engineer	14	1	44,430
Electronics engineer	13	1	37,599
Electronics engineer	12	1	31,619
Physicist	11	1	26,381
Electronics technician	9	1	21,804
Administrative/technical support	9	1	21,804
Total salaries		8	280,329
Less lapse		-4	-140,329
Total compensation		4	140,000
Personnel benefits			20,000
Travel and transportation of persons			41,000
Transportation of things			10,000
Communications, utilities, and other rent			10,000
Printing and reproduction			5,000
Other services			228,000
Supplies and materials			88,000
Equipment			43,000
Transfer to the Working Capital Fund			365,000
Total			950,000

Building research

Budget priorities for NBS were formulated with particular concern for areas where the Federal government may be undertaking efforts that are more properly the role of private sector and State and local governments. Building regulations and safety are traditionally overseen by State and local governments. In addition, the construction industry and associations have economic incentives to assure and improve building safety. As this program is phased down, the use of the research facility in support of programs for the private sector and other Federal agencies will be explored. Existing contracts with other government agencies will be honored. A decrease of $3,100,000 and 41 positions is requested.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Engineer	15	-8	-$459,904
Engineer	14	-6	-293,238
Physicist	14	-2	-97,746
Engineer	13	-4	-165,432
Research psychologist	13	-2	-82,716
Engineer	12	-4	-139,124
Physicist	12	-2	-69,562
Technician	11	-4	-116,072
Technician	9	-2	-47,970
Technician	7	-1	-19,606
Secretary	5	-6	-94,980
Subtotal, permanent positions		-41	-1,586,350
Positions other than permanent		-5	-155,650
Total salaries		-46	-1,742,000
Personnel benefits			-183,000
Travel and transportation of persons			-104,000
Transportation of things			-5,000
Communications, utilities, and other rent			-15,000
Printing and reproduction			-5,000
Other services			-522,000
Supplies and materials			-171,000
Equipment			-137,000
Grants			-216,000
Total			-3,100,000

Fire Research

Budget priorities for NBS were formulated with particular concern for areas where the Federal Government may be undertaking efforts that are more properly the role of private sector and State and local governments. Fire safety is traditionally overseen by State and local governments. In addition, industry, insurance companies, and associations have economic incentives to assure improved fire safety. As this program is phased down, the use of the research facility in support of programs for the private sector and other Federal agencies will be explored. Existing contracts with other Government agencies will be honored. A decrease of $5,141,000 and 40 positions is requested.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Engineer	15	-2	-$114,976
Physicist	15	-2	-114,976
Engineer	14	-3	-146,619
Physicist	14	-4	-195,492
Research chemist	14	-4	-195,492
Engineer	13	-4	-165,432
Physicist	13	-2	-82,716
Research chemist	13	-2	-82,716
Engineer	12	-3	-104,343
Physicist	12	-3	-104,343
Research chemist	12	-2	-69,562
Engineer	11	-3	-87,054
Technician	9	-3	-71,955
Secretary	7	-1	-19,606
Secretary	5	-2	-31,660
Subtotal, permanent positions		-40	-1,586,942
Positions other than permanent		-3	-93,058
Total salaries		-43	-1,680,000
Personnel benefits			-176,000
Travel and transportation of persons			-49,000
Transportation of things			-6,000
Communications, utilities, and other rent			-47,000
Printing and reproduction			-11,000
Other services			-619,000
Supplies and materials			-173,000
Equipment			-380,000
Grants			-2,000,000
Total			-5,141,000

Engineering Measurements and Standards
Reimbursable Program by Source of Support

(Dollars in thousands)

	1985 Actual	1986 Estimate	1987 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$4,227	$4,443	$4,632
Army	3,141	3,352	3,431
Navy	9,258	10,188	10,121
Other	991	1,669	1,576
Subtotal, Department of Defense	17,617	19,652	19,760
Department of Commerce	52	55	56
Consumer Product Safety Commission	654	740	699
Department of Justice	938	985	1,034
Department of Labor	131	136	141
Federal Emergency Management Agency	1,139	1,370	1,198
Department of Energy	9,055	9,356	9,606
Environmental Protection Agency	292	299	307
General Services Administration	208	208	207
Department of Health and Human Services	45	45	47
Department of Interior	406	416	427
National Science Foundation	357	357	357
National Aeronautics and Space Administration	1,671	1,923	1,843
Nuclear Regulatory Agency	136	140	143
Department of Transportation	486	707	498
Department of Treasury	427	465	384
U.S. Postal Services	98	...	...
Veterans Administration	301	312	323
Other	770	754	583
Total, Other Agency	34,783	37,920	37,613
Calibrations and Tests	2,135	2,281	2,353
Standard Reference Materials (SRM)	480	451	528
Technical and Advisory Services	3,344	3,474	3,612
Total, Reimbursable Program	40,742	44,126	44,106

Activity: Measurement and Engineering Research and Standards
Subactivity: Computer Sciences and Technology

(Dollar amounts in thousands)

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Computer sciences and technology	Appropriation....	172	$10,000	169	$9,657	147	$9,657	112	$5,000	-35	-$4,657
		(176)	(10,966)	174	(9,723)	(154)		(113)	(5,004)	(-41)	
	Reimbursements....	(44)	(2,664)	(45)	(4,645)			(47)	(4,808)		

NOTE: Appropriation amounts not in parenthesis represent permanent positions and budget authority. Appropriation and reimbursable amounts shown in parenthesis represent total work years and obligations. Reimbursable obligations for 1986 and 1987 rqpresent best estimates of the funding levels.

Goals and Objectives

This subactivity supports the Department of Commerce goals of 1) promoting the development and application of science and technology in U.S. industries; 2) increasing the competitiveness of U.S. telecommunications, computer and information products and services; 3) increasing the acceptance of international technical standards based on U.S. technology; and 4) improving the Federal Government's use of computer and telecommunications technology.

The goal of this subactivity is to conduct research and provide technical support to the Federal Government, state and local governments, and the private sector in the effective use of computers and networks leading to (1) technically sound international standards that will preserve the competitive options of the American automated data processing (ADP) industry; (2) the increased productivity of both the Federal and private sector work force; (3) the reduction of waste, error, and unnecessary duplication in the application of computer systems; (4) the competitive and economic procurement of Federal computer systems, components, and services; (5) life-cycle efficiency and effectiveness of Federal computer resource utilization; (6) portability of data, software, and technical skills across computer systems; and (7) protection of computer systems and networks against unauthorized access, manipulation, or abuse.

Objectives:

- o Coordinate the development of voluntary industrial standards for computer software and networks by national and international standards-making organizations supported by laboratory measurement and evaluation activities.
- o Establish close communications with Federal agencies to determine needs for standards and guidelines that are timely, efficient, and compatible with industry.
- o Advise the Secretary of Commerce, the Office of Management and Budget (OMB), and the General Services Administration (GSA) on policies and procedures for federal agency management and use of computers.

Base Program

This program is conducted by the Institute for Computer Sciences and Technology (ICST) under the NBS Organic Act, the Brooks Act, and the Department of Commerce goals for improved trade and productivity. The Brooks Act (P.L. 89-306) augments the NBS Organic Act specifically in the area of computers and data processing. Under OMB Circulars (A-108 and A-71), ICST is responsible for developing standards and guidelines for the Federal Government on computer and data security.

ICST is recognized as the de facto spokesman for the largest single ADP user in the nation, the Federal Government. In this capacity, ICST substantially accelerates a process which results in off-the-shelf ADP products and, therefore, in lower costs to large private and public sector ADP users. As a user representative, ICST has staff members on about sixty voluntary standards committees and chairs about a dozen of them. To ensure that these responsibilities have a sound scientific base, NBS performs research in areas such as the development of computer network protocols, which permit the sharing of expensive information resources through the interconnection of computers, and computer software standards, which reduce costs and improve productivity in the development and maintenance of computer applications. Research done in ICST laboratories is necessary both to establish the scientific basis for technical guidance and also to ensure that ICST's "user voice" is, in fact, technically knowledgeable and that leadership in the voluntary arena results in standards that meet both industry and user requirements.

ICST encourages the consensus that leads to standardization and subsequently to competition within an aggregated, and therefore expanded, market. The standardization efforts are equally important for the protection of the international competitive position of the American ADP industry, which includes 70 percent of the worldwide software market - an industry that produces a favorable balance of trade in excess of $18 billion annually. ICST's current emphasis on international networking standards has influenced the development of international standards consistent with the requirements of the American computer industry.

Rapid changes are occurring and will continue to occur in all areas of computer and communications technology, for example, the development of powerful desk-top computers, sophisticated software, and supercomputer technology. These developments make selection and application of new technology more difficult for the user. The Federal Government plans to spend over $15 billion in fiscal year 1986 for computers and telecommunications and is becoming increasingly dependent on computers to carry out essential programs and deliver services to the public. ICST works with private industry and Federal, state and local governments to arrive at approaches to using technically sound technology to reduce risks, and to expedite the harnessing of new technology. Cooperative technology transfer activities include conferences, workshops, electronic bulletin boards, an extensive publications program, technology forecasts, and joint laboratory testing programs.

Projects funded by other Federal Agencies complement and support this subactivity by providing ICST with in-depth experience in evaluating the effectiveness of standards and guidelines and facilitating the application of new technology. These projects provide direct technical assistance to individual agencies, and are selected to expand ICST's knowledge of government-wide requirements and issues. For example, ICST is assisting NASA in developing plans for NASA-wide use of advanced software technology to increase productivity and improve the reliability of future space systems. Additionally, ICST is assisting the Department of Defense in determining their requirements for networking protocols, and by presenting those requirements in national and international standardization forums.

Planned accomplishments for fiscal year 1986 include the following:

o Develop standards and supporting test methodologies for computer networks, including an internet protocol, a device connection standard for local area networks, and a message transfer protocol.
o Develop testing methods in cooperation with industry to support evolving international standards for computer graphics systems and data dictionaries.
o Develop guides on requirements analysis for office automation and for selecting and evaluating software packages.
o Test and evaluate technology to assist users in interchanging data on flexible magnetic media.
o Develop a technical guide on selection criteria for computer security evaluation methods and tools.

Planned accomplishments for fiscal year 1987 include the following:

o Develop guides on software acceptance testing and fourth generation programming languages.
o Develop guides on physical database design and the use of standard data dictionary systems and a standard for three dimensional computer graphics.
o Develop guides on computer security for personal computer systems and on automated risk management methods.
o Develop guide on evaluating methods for document interchange among different computer systems.

Decrease for 1987

	1987 Base		1987 Estimate		Inc. (+)/Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Computer sciences and technology............	147 (154)	$9,657	112 (113)	$5,000	-35 (-41)	-$4,657

Budget priorities for NBS were formulated with particular concern for areas where the Federal government may be undertaking efforts that are more properly the role of the private sector. NBS will concentrate its standards and guidelines development activities in areas that support ADP needs of the Federal government. Specific areas of government concern such as software management; end user computing, computer security, and information management will be addressed. Privatization of the "networking" program of ICST has been discussed with industry over the past year. Very recently industry has independently set up a not-for-profit organization to complement and supplement the government "networking" program. NBS hopes to be able to report on the implications of this on the ICST program in the near future.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
General physical scientist..........................	15	-1	-$57,488
Computer scientist..................................	15	-4	-229,952
Mathematician.......................................	15	-1	-57,488
Computer specialist.................................	15	-2	-114,976
Computer scientist..................................	14	-3	-146,619
Computer specialist.................................	14	-1	-48,873
Mathematician.......................................	14	-2	-97,746
Computer scientist..................................	13	-4	-165,432
Computer specialist.................................	13	-2	-82,716
Computer scientist..................................	12	-3	-104,343
Computer scientist..................................	11	-2	-58,036
Computer specialist.................................	11	-2	-58,036
Technician..	10	-1	-26,411
Administrative assistant............................	9	-1	-23,985
Technician..	9	-2	-47,970
Technician..	7	-1	-19,606
Secretary...	7	-1	-19,606
Secretary...	6	-1	-17,645
Secretary...	5	-1	-15,830
Subtotal, permanent positions..................		-35	-1,392,758
Positions other than permanent......................		-6	-293,242
Total salaries..................................		-41	-1,686,000

Personnel benefits..................................	-177,000
Travel and transportation of persons................	-144,000
Transportation of things............................	-25,000
Communications, utilities, and other rent...........	-108,000
Printing and reproduction...........................	-46,000
Other services......................................	-1,500,000
Supplies and materials..............................	-529,000
Equipment...	-442,000
Total...	-4,657,000

Computer Sciences and Technology
Reimbursable Program by Source of Support

(Dollars in thousands)

	1985 Actual	1986 Estimate	1987 Estimate
Other Agency Funding:			
Department of Defense			
Air Force	$405	$790	$740
Navy	550	537	300
Other	936	1,981	2,450
Subtotal, Department of Defense	1,891	3,308	3,490
Department of Commerce	...	220	250
Department of Justice	202	270	270
Department of Energy	4	110	100
Environmental Protection Agency	...	65	100
National Aeronautics and Space Administration	200	200	200
Nuclear Regulatory Agency	148	150	150
Department of Transportation	72	...	...
Department of Treasury	36	135	100
Other	22	95	50
Total, Other Agency	2,575	4,553	4,710
Standard Reference Materials (SRM)	46	48	51
Technical and Advisory Services	43	44	47
Total, Reimbursable Program	2,664	4,645	4,808

Subactivity: Research Support Activities

(Dollar amounts in thousands)

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Technical competence program	Appropriation....	130 (133)	$8,598 (8,567)	127 (131)	$8,477 (8,569)	131 (134)	$8,965	106 (109)	$7,465 (7,468)	-25 (-25)	-$1,500
Research associate program	Appropriation....	17 (56)	2,598 (2,463)	17 (55)	2,460 (2,597)	18 (57)	2,544	18 (33)	903 (904)	... (-24)	-1,641
Computing support	Appropriation....	31 (31)	3,730 (6,299)	30 (31)	4,788 (5,228)	31 (31)	4,803	31 (31)	5,353 (5,355)	... (...)	+550
	Reimbursements....	(...)	(639)	(...)	(1,500)			(...)	(1,575)		
Product standards	Appropriation....	52 (53)	3,051 (3,107)	51 (52)	2,956 (3,017)	53 (54)	3,090	53 (54)	3,090 (3,091)	... (...)	...
	Reimbursements....	(7)	(862)	(7)	(892)			(7)	(835)		
Facilities modifications and improvements	Appropriation....	3 (3)	640 (598)	3 (3)	645 (2,733)	3 (3)	653	3 (3)	653 (653)	... (...)	...
Special facilities: Cold Neutron Facility	Appropriation....	... (...)	... (...)	... (...)	... (...)	... (...)	...	31 (5)	10,000 (9,925)	+31 (+5)	+10,000
Transfer to working capital fund General Equipment	Appropriation....	... (...)	3,265 (...)	... (...)	... (...)	... (...)	...	... (...)	... (...)	... (...)	...
Standard Reference Materials	Appropriation....	... (...)	400 (...)	... (...)	300 (...)	... (...)	200	... (...)	200 (...)	... (...)	...
Non-technical supporting services	Reimbursements....	(11)	(3,016)	(11)	(3,198)			(12)	(3,359)		
WCF investments and operating adjustments	Reimbursements....	(...)	(4,918)	(...)	(2,102)			(...)	(2,144)		
Total requirements	Appropriation....	233 (276)	22,282 (21,034)	228 (272)	19,626 (22,144)	236 (279)	20,255	242 (235)	27,664 (27,396)	+6 (-44)	+7,409
	Reimbursements....	(18)	(9,435)	(18)	(7,692)			(19)	(7,913)		

NOTE: Appropriation amounts not in parenthesis represent permanent positions and budget authority. Appropriation and reimbursable amounts shown in parenthesis represent total work years and obligations. Reimbursable obligations for 1986 and 1987 represent best estimates of the funding levels.

Goals and Objectives

This subactivity groups the centrally managed programs that provide support to all other NBS programs. This support includes (1) Technical Competence Program - develop competence in NBS mission-oriented areas of research and services upon which NBS and its clientele can rely for expertise now and in the future; (2) Research Associate Program - provide outstanding scientists and engineers from industry, academia, and other Federal agencies an opportunity to participate in research programs in the various branches of physical, chemical, engineering, and mathematical sciences; (3) Computing Support - provide computer support to NBS programs that is responsive to evolving scientific and engineering demands of NBS scientists, engineers, and administrators to achieve the major mission goals of NBS; (4) Product Standards - formulate and implement policy guidelines related to standardization and legal metrology; (5) Facilities Modifications and Improvements - maintain a satisfactory environment for conducting the NBS technical programs; (6) Transfers to the Working Capital Fund - ensure that sufficient funds are available for investment in inventories of materials offered for sale.

Objectives:

- o Ensure that NBS has the knowledge and skills necessary to meet the responsibilities included in its enabling legislation and additional legislative mandates and administrative directives. This will be accomplished by (1) establishing areas of technical excellence through long-term research responsive to technological development; and (2) developing the expertise and knowledge for planned new programs to be undertaken in response to changing national needs.
- o Recruit and select candidates, primarily from the private sector, to pursue cooperative research projects and interact with NBS staff thereby enhancing working relationships with the private sector and effectively transferring NBS technology to the industrial community.
- o Select graduate students and postdoctoral scientists and engineers of unusual promise and ability to augment NBS efforts in maintaining its technical competence.
- o Augment existing NBS computing capability to provide NBS scientists and engineers with state-of-the-art computing resources.
- o Formulate and implement policy guidelines related to national and international standardization and legal metrology.
- o Develop and transfer the technical basis for the uniform administration of an equitable weights and measures system by state and local jurisdictions to encourage commercial efficiency.
- o Provide for improvements, replacements, and modifications to the NBS facilities that ensure the continued usefulness and safety of existing laboratories and buildings.
- o Determine additional energy conservation measures which will further reduce energy consumption in compliance with legislative guidelines.

Base Program

Technical Competence Program

This program was established to ensure NBS' technical expertise and to build the capacity to contribute effectively to future national needs and goals. The ability of NBS to respond to directly mandated responsibilities and needs of other Federal agencies arises from the basic technical competence of the NBS staff and a carefully planned program of long-term research.

The selection of specific competence projects is based on the following criteria: potential for long-range public and economic benefit; scientific and technical merit; match to NBS mission objectives; and potential for transferring outputs to NBS program areas and clientele. After identifying the scientific and technical areas where competence building efforts are needed, the critical size of these efforts and the desirable rate of development are determined and used to estimate the required resources in personnel, equipment, and operating funds. Priorities are determined considering the needs established in the initial assessment process, the impact on industry and society, scientific opportunity, and other factors. Resources are then allocated to competence efforts in order of priority. Adjustments of funding for specific projects are made depending on changing needs, rate of progress, and technical opportunities.

Planned accomplishments in fiscal year 1986 include the following:

o Use high intensity, high energy, UV light to determine the feasibility of breaking down biomolecules and determine the structure of molecules that do not absorb visible light. Instrument manufacturers and industrial biotechnologists will use this information for sensitive and selective determination of biomolecules.

o Complete measurements of detectable types of cross-links between DNA and proteins in irradiated model systems. This will clarify the physical processes underlying the biochemical effects of ionizing radiation.

o Adapt advanced methods of photo-deep-level-transient spectroscopy to the characterization of key defects that give rise to desirable semi-insulating behavior in gallium arsenide. Improved understanding of this behavior is crucial to the evaluation of gallium arsenide materials used in the manufacture of advanced integrated circuits.

o Publish a technical report on solution techniques for integer programming problems and results of comparative tests of the resulting computer algorithms. These are used, for example, in minimizing the test procedures required to calibrate automatic electronic systems.

Planned accomplishments in fiscal year 1987 include the following:

o Measure insertion losses in titanium-diffused lithium niobate optical waveguides, and establish correspondence with theory. This is essential for later development of meaningful methods of characterizing optical losses, which are a major barrier to the emergence of integrated optics.

o Develop and experimentally verify a computer model to predict the formation, growth, agglomeration and oxidation process of particles in high temperature reacting flows that are typical of important chemical processes. These models will be used to optimize the efficiency of the process and the quality of the products.

o Demonstrate the use of the pipeline image processing engine (PIPE), a new parallel computing algorithm. This will permit rapid machine analysis of image data by robot vision systems.

o Examine the DNA damage mechanisms related to the development of biochemical radiation dosimetry. This approach to dosimetry would permit measurements which are more directly related to biological effects rather than the usual measure of energy deposition.

o Develop and demonstrate the use of state-of-the-art instrumentation for the rapid collection of protein structure data. This will increase the speed and accuracy by which structures can be determined in biotechnology industries.

Research Associate Program

This program consists of the Industrial Research Associate program, the Postdoctoral Research Associate program, and the Graduate Cooperative Education program. These components have the direct effect of maintaining NBS competence and supporting NBS programs by making available each year more than 200 high caliber scientists and engineers for ongoing research programs and providing a mechanism for the transfer of the results of NBS research to the scientific and engineering communities. The Research Associate programs serve as an excellent information exchange system and recruitment vehicle.

The Industrial Research Associate program enables scientists and engineers from industrial, professional, trade, and other organizations to work at NBS under the sponsorship of their employers who cover all personal expenses. These research associates contribute their special expertise, working with NBS staff on projects of clear mutual interest. In addition to providing an effective means of information exchange, this program also makes available to the private sector the excellent, and often unique, research facilities which exist in Government laboratories. Participants in the Postdoctoral Research Associate program are scientists and engineers who have recently earned their doctorate degree and have demonstrated superior ability for creative research. The prospective candidates are evaluated by the National Academy of Sciences/National Research Council. Associateships are awarded for work at NBS in the various branches of the physical, engineering, and mathematical sciences. Their significant contributions to ongoing research programs at the Bureau often result in their becoming permanent employees of NBS. Through the Graduate Cooperative Education program, students are appointed to work at NBS to enhance ongoing research programs. Many of these students are hired by NBS upon completion of their graduate work. The Postdoctoral Research Associate and Graduate Cooperative Education programs are fully supported by appropriated funds.

Recent accomplishments by the group of postdoctoral associates included the following:

- Developed simplified techniques for solving algebraic problems by computer. These unique techniques are needed for precision spectroscopy, the design of ultra-high-speed electronic circuits, and for orbit calculations for time-signal satellites.
- Obtained direct confirmation of kinetic theory concerning the role of diffusional interactions between particles in two-phase solid mixtures. These results are important for control of the elevated temperature properties of precipitate-hardened alloys.
- Characterized molecules adsorbed on industrially important metal and metal-oxide catalyst surfaces in order to determine the effect of changing the chemical state of the metal on surface molecular properties and processes.
- Achieved the first measurement of the transfer of vibrational energy of molecules adsorbed on surfaces. Results will lead to improved understanding of chemical reactions involving catalysts.
- Utilized a thermodynamic model of the gas chromatographic separation process to construct computer algorithms to predict elution behavior on sequentially coupled capillary columns. This capability to predict elution behavior will allow analysts to select optimum conditions for the separation of individual chemical compounds from complex mixtures with increased efficiency and accuracy.
- Determined C^{14}/C^{12} ratios for families of chemical species with potential carcinogenic activity from the organic fractions of air particulates. This information will be correlated with other separations data to assess anthropogenic or natural sources of chemical species.

Computing Support

This program provides for the minimal staffing and operation of a Class VI Supercomputer and associated equipment which comprise the central component of the Consolidated Scientific Computer System for NBS and NOAA/ERL.

The Consolidated Scientific Computer System enables NBS and NOAA/ERL to meet their current scientific needs for large-scale high precision numerical calculations, large scale mathematical modeling, sophisticated data analysis, and database management. This computing capability enhances the scope and effectiveness of NBS and NOAA/ERL long range solutions to important problems in such areas as atomic and molecular properties, electronics, materials, chemical properties, aeronomy, severe storms, and marine environment. This capability in analyzing and reducing experimental data and preparing and disseminating the results of research will have the following benefits:

- Encourage replacement of time-consuming and expensive experiments by analysis of appropriate models for a variety of purposes. This includes enhancing insight and understanding of complex physical phenomena, testing theories about behavior of systems against experimental observation, simulating conditions which are difficult or impossible to observe in the laboratory, designing and evaluating measurement tools, and evaluating alternative strategies for improving characteristics of materials and systems.
- Make possible the rapid organization, search, and analysis of scientific data in such areas as experimental and measurement quality control, gaining insight into phenomena and experimental behavior, reducing data volume and developing descriptors of data output, and evaluating measurement performance.
- Allow closer coordination with industry, commerce, research institutions, and other Government agencies in the use of specialized databases including standard reference data, data for measurement and calibration quality control, and bibliographic information concerning standards and standard reference data.

Product Standards

This program formulates and implements policy guidelines related to national and international standardization and legal metrology. The program also cooperates with domestic, foreign, and international treaty and non-treaty organizations concerned with standardization and related measurement activities.

First, the program addresses Departmental responsibilities for implementing the Trade Agreements Act of 1979, concentrating on unnecessary technical barriers to trade, such as different foreign regulations or national standards for the same product rather than a single, internationally accepted standard. Efficiency of U.S. production, competition, and product distribution depends on accurate, readily available information on domestic, foreign and international standards; requirements for testing and certification; and proposed regulations. This information is critical to U.S. industry in order to establish competitive positions in the markets of other countries. To provide for these needs, the program operates the National Center for Standards and Certification Information, which responds to approximately 7,000 inquiries annually from business (50 percent), governmental agencies (30 percent), consumers, students, and others (20 percent). The center uses a unique reference collection consisting of information on more than 260,000 standards and specifications issued by the U.S., foreign, regional, and international standards-writing organizations.

Second, the program provides overall management, planning, policy development, impact analysis, and coordination of the Department's involvement with engineering standards and information; coordinates standards policy, especially with respect to voluntary standards, among Federal agencies; and advises management on the resolution of standards issues. The Standards Assistance and Management Information activity develops data on participation by departmental staff in domestic and international standards committees. The program also administers Departmental responsibilities associated with OMB Circular A-119, which encourages effective participation by agencies in the private sector standards community in order to satisfy Government needs for standards that may be used in purchasing and regulations. This includes development of procedures and practices for full implementation of OMB Circular A-119. The program also functions as the Federal Government's liaison with the private sector's national coordinating organization.

In addition, the program supports the legal metrology (i.e., weights and measures) system of the United States domestically and internationally, by providing the required measurement technology to the states. The transfer of measurement technology to the states is accomplished through coordinated use of computerized statistical analyses for the application of that technology to state inspection, laboratory, and information services activities. Other major activities include providing technical assistance to the National Conference of Weights and Measures for the continued development of a national training program; administering the National Conference of Weights and Measures; providing traceability of state measurement standards to the national standards at NBS; and promoting uniform practices through model state laws, regulations, and standards for weights and measures. The program is also responsible for conducting the meetings of U.S. working groups of the International Organization of Legal Metrology (OIML) to draft international recommendations covering instruments used in commerce and presenting these recommendations at international meetings of OIML. The essence of the domestic activity is to assure industry and the public that the weights and measures used are uniform and accurate, with traceability to national standards, while the U.S. involvement in OIML seeks to keep foreign markets accessible to U.S. instrument and device manufacturers.

Starting in fiscal year 1985, the National Voluntary Laboratory Accreditation Program (NVLAP) was funded on a reimbursable basis. The program assesses the capabilities of testing laboratories and accredits them as being competent to perform specific tests using well defined standards and test methods. The evaluation is based on on-site assessment of the laboratory's facilities, staff, equipment, etc. and its performance in proficiency testing exercies. NVLAP's directory of accredited laboratories is used by government and industry as a source for locating reliable laboratories to produce test data for procurement and regulatory decisions.

Planned accomplishments in fiscal year 1986 include the following:

- Initiate operation of a computer-based index for standards and specifications of the U.S. Government, not otherwise published in the Federal Register, the Code of Federal Regulations, or other readily available sources.
- Publish a training textbook to replace NBS Handbook 82, Weights and Measures Administration to provide definitive guidance for organization and operation of state programs.
- Gain acceptance at the OIML Committee level of U.S. proposals for international recommendations for legal instruments for measuring pesticides, toxic substances, and pollutants in water.
- Complete revision of sections on Liquid Petroleum Gas/Liquid Measuring Devices and Vapor Measuring Devices in NBS Handbook 44.

Planned accomplishments in fiscal year 1987 include the following:

- Establish an automated reference system of state weights and measures laws and regulations to provide a single source of information for industry, domestic and international agencies, and the general public.
- Complete and publish a three part index of U.S. certification systems operated by the Federal Government, state governments, and the private sector.
- Complete a feasibility study and, if appropriate, assist the Office of the Federal Register in planning implementation of a system to spotlight standards and specifications published in the Federal Register and Code of Federal Regulations.
- Sign multilateral agreement with the Federal Republic of Germany, United Kingdom, The Netherlands and Australia for mutual acceptance of pattern approval test results for load cells.
- Complete work on OIML International Recommendations in the areas of gas measurement and reference materials for use in medical and biological research.

Facilities Modifications and Improvements

Regular improvements, replacements, and modifications to existing laboratories and buildings and on occasion, extraordinary repairs necessary to restore facilities damaged by natural causes are budgeted for in this line item. The goals of this program are to improve operational capabilities of NBS facilities, undertake modifications to improve access for the handicapped, and to keep existing buildings and facilities up to date and responsive to NBS programs and safety requirements.

Examples of recent and planned accomplishments include the following:

- Award of a contract for new digital PBX telecommunications system which will be capable of transmitting voice and data simultaneously.
- Installation of fire suppression systems for cafeterias at the Gaithersburg site.
- Installation of a processing chemical fume exhaust system in Gaithersburg Photographic laboratory.
- Installation of a security alarm system to monitor doors at the Boulder site.
- Continued progress in the elimination of architectural barriers at both sites to make them more accessible to handicapped.

Transfers to the Working Capital Fund

The fiscal year 1986 funding level of $300,000 will permit NBS to capitalize the research and development costs of Standard Reference Materials (SRM's). In fiscal year 1987 this funding level will be reduced to $200,000.

Increases/Decreases for 1987

	1987 Base		1987 Estimate		Inc. (+)/Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Computing support...........................	31 (31)	4,803	31 (31)	5,353	... (...)	+550
Special facilities: Cold Neutron Facility..	... (...)	...	31 (5)	10,000	+31 (+5)	+10,000
Technical competence program................	131 (134)	$8,965	106 (109)	$7,465	-25 (-25)	-$1,500
Research associate program..................	18 (57)	2,544	18 (33)	903	... (-24)	-1,641
Total..................................	180 (222)	16,312	186 (178)	23,721	+6 (-44)	+7,409

Computing Support (Scientific Computing)

An increase of $550,000 is requested to enable NBS to provide for the expertise, in the form of computer scientists and computer systems specialists, to improve the productivity of the Department of Commerce Consolidated Scientific Computer System. Although funding has been provided for the acquisition and basic operation of the Consolidated Scientific Computer System, additional funding will be needed in fiscal year 1987 to exploit the capabilities of this system.

Supercomputers have a great reputation for productivity and speed when dedicated to specific problems such as weather mapping or weapons design but experience has shown that several years of intense effort are required to bring these systems into efficient operation when applied to general laboratory problems such as those found at NBS and NOAA. Investigations of operational experience at several successful supercomputing centers including the National Aeronautics and Space Administration at Goddard, the National Magnetic Fusion Energy Center, the National Center for Atmospheric Research, and the Bell Telephone Laboratories have underscored the need to augment the basic operation staff with expert computer scientists and computer systems analysts to create the user friendly computing environment required to realize the full potential of a supercomputer. Researchers left to their own devices will average a speedup in computing of about four fold when they move their computing work from a conventional system to a supercomputer. If expert help is provided to permit full realization of the supercomputer's capability then a speed up of about 50 fold should be attained. This expertise is of particular importance because supercomputers are a recent development and have relatively little general purpose software.

The requested increase will be applied to aiding users with interface problems to assure compatibility of existing hardware, software, graphics, and communications with the supercomputer; establishing a documentation system for user routines to aid in problem solving and future modifications; and ensuring the most efficient processing of large volumes of data which are fed into and out of the supercomputer via networks, telecommunications links, direct connectors, and hyperchannel from remote sites and from various laboratories at the Gaithersburg site.

Planned accomplishments in fiscal year 1987 include the following:

- Develop vectorized algorithms for sorting and data compression to reduce computing time required in studies such as those of condensed matter and of fundamental properties of fluids in chemical engineering.
- Develop vector-oriented precompiler to improve the efficiency of complex numerical analysis routines made available in general-purpose libraries used by modelers, for example in materials science.
- Develop vectorized algorithms and memory management methods for efficient operation of large-scale mathematical models, such as models of fluid flow with chemical reactions.

The object class detail follows:

Object Class	Amount
Other services	$550,000

Special Facilities (Cold Neutron Research Facility)

An increase of $10,000,000 and 31 positions is requested to establish a facility for cold neutron research on materials. This facility will provide U.S. scientific and industrial communities with critical measurement capabilities on the properties, performance, and processing of materials and chemicals. The capability for cold neutron scattering investigations of the structure and microstructure of bulk materials will provide technological information needed to meet major long-term needs of U.S. industry.

The United States is far behind other industrialized countries, particularly Germany, France, and Great Britain, in the development of cold neutron research facilities. High-intensity cold neutron beams open up totally new research opportunities for all major types of materials such as metals, polymers, ceramics and composites necessary for communication, transportation, electronic device technology, and biomolecular engineering. Creation of such a facility in the private sector in the United States is not feasible because of the capital investment required to construct a research nuclear reactor (no appropriate research reactor currently exists in the industrial or university communities), and the necessity for construction of substantial auxiliary facilities. Significant financial leverage will be achieved by augmenting the existing NBS reactor with a cold neutron capability rather than constructing a new facility which would cost over $150 million and take approximately ten years to complete.

Among the several major research reactors in this country, only the NBS reactor was designed to allow the installation of a cold source of sufficient volume for the development of the flexible array of instruments needed to give the U.S. research community a capability competitive with the best in the world. Funding for the development of an advanced cold neutron source was provided in the fiscal year 1985 budget. The increases in this proposal will provide the facilities necessary for the full exploitation of this source and will create a world class cold neutron research capability for the United States, at a fraction of the investment already expended or approved in western Europe and Japan. A high level committee of the National Academy of Sciences has very recently called for immediate implementation of cold neutron research facilities as its highest priority recommendation.

The function of the cold source is to increase the number of low energy long wavelength neutrons available for experiments. The large volume of the NBS cold source will provide a high flux of cold neutrons that will be piped through large reflecting guide tubes into an experimental hall to be constructed adjacent to the reactor building. Fifteen state-of-the-art research stations will be constructed inside the hall along the reflecting guide tubes. Five of these stations will be set aside for use by industry and will be equipped at industry expense and operated by industrial researchers. The experimental facilities will be designed and installed over a four year period and will provide essential new measurement capabilities. Investigations of submicron structural features, atomic scale processes, and physical properties of bulk materials will be possible because of the penetrating power of cold neutrons and their ability to resolve features. New quantitative research on polymers, chemical catalysts, and rapidly solidified metallic alloys will be performed. The facility will allow unique fundamental research on the structure, enzymatic activity, and biological interactions of new or modified biosystems created through bioengineering and sensitive depth profiling of defect concentrations in semiconductor devices. A staff of 31 will be needed to develop and maintain both the facilities of the center and a state-of-the-art capability for the great variety of scientific applications opened by these new facilities. It is essential to the efficient, safe, and productive use of this facility that a high level of staff expertise be maintained. The new instrumentation and research opportunities provided are directly related to the programs and mission activities of NBS and will furnish broad new opportunities in materials research, chemical physics, analytical chemistry, quantum metrology, and nondestructive evaluation. This cold neutron research facility will foster a new program with U.S. universities and industry supporting broad cooperative research efforts which require the special measurement capabilities provided by this initiative. NBS will coordinate its expanded programs in neutron scattering research with the research efforts and plans of other neutron research centers in the United States and provide access to this unique facility to a wide variety of users.

The successful completion of this initiative will make the United States competitive with the best European cold neutron research centers, put us ahead of Japan in this critical research area, and provide U.S. industries and universities with an order of magnitude increase in our current capability for investigating the microstructure and atomic-scale behavior of bulk materials with cold neutrons. The advanced measurement technology introduced by this initiative has broad application in basic and applied science in the materials, communication, transportation, chemical, electronic, and biotechnology industries. Access to a world-class cold neutron research facility is an important step toward allowing our materials-based industries to compete successfully with other industrialized nations in the development of new and improved materials and products. On the basis of the strong cooperative research efforts underway with the private sector at our existing neutron facilities, NBS expects strong support for this initiative from leaders of industrial science. Current cooperative projects with industry and universities are typical of those that would be created or expanded with the availability of the cold neutron source: with General Electric, microstructures of materials for advanced engine and aircraft components, (e.g., lightweight high-strength alloys and superalloys); with Exxon and University of Wisconsin, the structure of innovative polymer blends and new chemical feedstocks; with Allied Chemical and University of Maryland, structure of new high-technology glassy metals; with du Pont, the structure of catalysts; with AT&T, new ceramics for small batteries; and with Intel, Motorola, and University of Michigan, NDE profiling of dopants controlling the performance of semiconductors and metal coatings.

Planned accomplishments for fiscal year 1987 include the following:

o Complete design and begin construction of cold neutron guide hall.
o Perform the first real-time measurements of the evolution of microstructure which controls the performance of new polymer blends and high-strength ceramics.

The $10,000,000 requested in fiscal year 1987 includes $9,500,000 for design and construction of the neutron guide hall and guide tubes. Funding continues until it reaches the steady state operating level estimated to be $3,000,000, at which time the program will be transferred to the Materials Science and Engineering subactivity.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Physicist	15	2	$104,524
Chemist	15	1	52,262
Physical chemist	15	1	52,262
Metallurgist	15	1	52,262
Materials scientist	15	1	52,262
Mechanical engineer	15	1	52,262
Physicist	14	2	88,860
Chemist	14	1	44,430
Physical chemist	14	1	44,430
Electronic engineer	14	1	44,430
Mechanical engineer	14	1	44,430
Physicist	13	2	75,198
Physical chemist	13	1	37,599
Chemist	12	1	31,619
Nuclear engineering technician	12	1	31,619
Engineering technician	12	1	31,619
Physical science technician	12	1	31,619
Physicist	11	1	26,381
Electronic technician	11	1	26,381
Nuclear engineering technician	11	1	26,381
Electronic technician	9	1	21,804
Engineering technician	9	1	21,804
Administrative/technical support	9	3	65,412
Secretary	6	1	16,040
Secretary	5	2	28,780
Total salaries		31	1,104,670
Less lapse		-26	-927,670
Total compensation		5	177,000

Personnel benefits....................................	25,000
Travel and transportation of persons..................	19,000
Transportation of things..............................	15,000
Communications, utilities, and other rent.............	3,000
Printing and reproduction.............................	1,000
Other services..	2,122,000
Supplies and materials................................	33,000
Equipment...	30,000
Lands and structures..................................	7,500,000
Transfer to the Working Capital Fund..................	75,000
Total..	10,000,000

Technical Competence Program

A decrease of $1,500,000 and 25 positions is requested for the Technical Competence Program. This amount represents the average annual rate of turnover of projects in this program and would not result in interruption to ongoing research or separation of personnel. Since 1979, $44.0 million has been devoted to this fund. These resources have been used by NBS to help alleviate the problem which led to the creation of the fund. This request brings NBS more in line with the recommendations of the White House Science Council's Federal Laboratory Review Panel concerning laboratory funds. The Federal Laboratory Review Panel was set up to review the Federal laboratories and to recommend actions to improve their use and performance.

The position and object class detail follows:

Position Title	GS Grade	Number	Annual Salary
Chemist..	15	-2	-$104,425
Engineer.......................................	15	-1	-52,262
Physicist......................................	14	-1	-44,430
Engineer.......................................	14	-1	-44,430
Computer systems analyst.......................	14	-1	-44,430
Mathematician..................................	14	-1	-44,430
Chemist..	13	-1	-37,599
Computer scientist.............................	13	-1	-37,599
Engineer.......................................	12	-1	-31,619
Computer scientist.............................	12	-1	-31,619
Computer programmer............................	12	-1	-31,619
Physicist......................................	11	-1	-26,381
Engineer.......................................	11	-3	-79,143
Chemist..	9	-1	-21,804
Physicist......................................	9	-1	-21,804
Engineer.......................................	9	-3	-65,412
Technician.....................................	7	-1	-17,824
Technician.....................................	5	-1	-14,390
Science aid....................................	5	-2	-28,780
Total compensation............................		-25	-780,000

Personnel benefits	-82,000
Travel and transportation of persons	-35,000
Transportation of things	-5,000
Communications, utilities, and other rent	-30,000
Printing and reproduction	-8,000
Other services	-260,000
Supplies and materials	-142,000
Equipment	-158,000
Total	-1,500,000

Research Associate Program (Postdoctoral Research Program)

A decrease of $1,641,000 and 24 other than permanent positions is requested in NBS' Postdoctoral Research Program. NBS will focus its recruiting more on particular high priority programs such as ceramics, biotechnology, and electronics and reduce the degree to which it relies on the general recruiting mechanism of the postdoc program. The reduced program will permit the eventual award of about 8 new two-year fellowships per year for a total of 16. The Industrial Research Associate and Graduate Cooperative Education programs remain unaffected.

The position and object class detail follows:

Object Class	Number	Annual Salary
Positions other than permanent	-24	-$686,000
Personnel benefits		-72,000
Travel and transportation of persons		-116,000
Transportation of things		-32,000
Communications, utilities, and other rent		-32,000
Printing and reproduction		-16,000
Other services		-432,000
Supplies and materials		-206,000
Equipment		-49,000
Total		-1,641,000

Research Support Activities
Reimbursable Program by Source of Support

	1985 Actual	1986 Estimate	1987 Estimate
	(Dollars in thousands)		
Other Agency Funding:			
Department of Commerce	$3,256	$4,280	$4,494
Department of State	115	121	127
Department of Treasury	55	58	60
Other	113	88	77
Total, Other Agency	3,539	4,547	4,758
Calibrations and Tests	26	75	35
Technical and Advisory Services	952	968	976
WCF Investments and Operating Adjustments	4,918	2,102	2,144
Total, Reimbursable Program	9,435	7,692	7,913

Activity: National Technical Information Service
Subactivity: Dissemination of Technical Information

(Dollar amounts in thousands)

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Appropriation Program Changes Inc.(+) Dec.(-)	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Dissemination of technical information	Appropriation....	...	...	...	...	...	...	...	...	...	...
		(...)	($58)	(...)	(...)	(...)		(...)		(...)	

NOTE: Appropriation amounts not in parenthesis represent permanent positions and budget authority. Appropriation amounts shown in parenthesis represent total work years and obligations.

Goals and Objectives

New budget authority for the National Technical Information Service is included in the Economic and Statistical Analysis appropriation within the Department of Commerce. Information concerning program activities is reflected in the budget justification for that appropriation.

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Scientific and technical research and services

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount	Emp. 12/31
11 Personnel compensation:										
11.1 Permanent positions............	1,723	1,614	$61,923	1,625	1,485	$57,014	-98	-129	-$4,909	1,586
11.3 Positions other than permanent.	282	204	4,742	244	166	3,514	-38	-38	-1,228	329
11.5 Other personnel compensation..................	...	...	1,322	...	...	1,322	...	...	...	...
Total.........................	2,005	1,818	67,987	1,869	1,651	61,850	-136	-167	-6,137	1,915
Other objects:										
12 Personnel benefits.............			8,086			7,457			-629	
13 Benefits for former personnel..			30			30			...	
21 Travel and transportation of persons......................			2,274			1,907			-367	
22 Transportation of things.......			424			413			-11	
23.2 Rental payments to others......			117			117			...	
23.3 Communications, utilities, and miscellaneous charges........			8,615			8,405			-210	
24 Printing and reproduction.....			339			267			-72	
25 Other services................			14,106			13,873			-233	
26 Supplies and materials........			9,487			8,460			-1,027	
31 Equipment.....................			9,937			8,893			-1,044	
32 Lands and structures..........			143			7,643			+7,500	
41 Grants, subsidies and contributions................			4,710			2,494			-2,216	
Transfer to National Bureau of Standards Working Capital Fund.................			1,454			2,144			+690	
Total requirements...........			127,709			123,953			-3,756	

Justification by Object Class
(Dollar amounts in thousands)

Object Class	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			Emp. 12/31
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11.1 Permanent positions										
Executive level...............	1	1	$72	1	1	$72	...	...	...	1
General schedule..............	1,484	1,397	53,551	1,386	1,268	48,642	-98	-129	-$4,909	1,316
Wage board....................	167	152	3,903	167	152	3,903	...	...	...	204
Senior executive service......	66	60	4,130	66	60	4,130	...	...	...	60
P.L. 80-313...................	5	4	267	5	4	267	...	...	...	5
Total, permanent positions..	1,723	1,614	61,923	1,625	1,485	57,014	-98	-129	-4,909	1,586
11.3 Positions other than permanent										
General schedule..............	235	185	4,458	197	147	3,230	-38	-38	-1,228	285
Wage board....................	9	7	128	9	7	128	...	...	...	18
Consultant....................	8	1	47	8	1	47	...	...	...	4
Student.......................	30	11	109	30	11	109	...	...	...	22
Total, positions other than permanent.................	282	204	4,742	244	166	3,514	-38	-38	-1,228	329
11.5 Other personnel compensation										
Overtime......................			517			517			...	
Cash awards...................			726			726			...	
Other.........................			79			79			...	
Total, other personnel compensation, NBS.......			1,322			1,322			...	
12.1 Personnel benefits										
Civil service retirement......			4,382			4,019			-363	
Federal Insurance Contribution Act (FICA).................			1,410			1,308			-102	
Health insurance..............			1,729			1,579			-150	
Life insurance................			153			139			-14	
Employees' Compensation Fund..			333			333			...	
Other.........................			79			79			...	
Total, personnel benefits...			8,086			7,457			-629	
13.0 Benefits for former personnel			30			30			...	

	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)		
Object Class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
21.0 Travel and transportation of persons									
Per diem......................			$1,180			$1,059			-$121
Common carrier.................			851			665			-186
Privately owned automobiles....			32			23			-9
Other			211			160			-51
Total, travel and transportation of persons..			2,274			1,907			-367
22.0 Transportation of things									
Total, transportation of things....................			424			413			-11
23.2 Rental payments to others									
Total, Rental payments to others....................			117			117			...
23.3 Communications, utilities, and miscellaneous charges									
Federal Telecommunications System (FTS)................			668			668			...
Other telephone, telegraph and teletype services............			759			684			-75
Postal services by USPS........			408			397			-11
Rental of automatic data processing equipment........			185			88			-97
Rental of office copying machines....................			249			221			-28
Other equipment rentals........			201			199			-2
Utilities......................			6,145			6,148			+3
Electricity..................			(3,835)			(3,838)			(+3)
Gas..........................			(1,846)			(1,846)			(...)
Water........................			(464)			(464)			(...)
Total, communications, utilities and miscellaneous charges....................			8,615			8,405			-210

Object Class	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)		
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount
24.0 Printing and reproduction									
Publications....................			$157			$105			-$52
Payment to Working Capital Fund, General Administration........			95			95			...
Other printing and reproduction			87			67			-20
Total, printing and reproduction................			339			267			-72
25.0 Other services									
Training:									
Office of Personnel Management..................			45			26			-19
Other.........................			554			433			-121
Payment to Working Capital Fund, General Administration........			1,194			1,194			...
Other Federal agencies:									
Department of Commerce........			1,592			1,295			-297
Other.........................			740			367			-373
Public sector....................			6,857			7,990			+1,133
Maintenance of equipment........			3,124			2,568			-556
Total, other services.........			14,106			13,873			-233
26.0 Supplies and materials									
Laboratory and general supplies.			7,510			6,557			-953
Scientific publications and journals......................			458			384			-74
Fuel oil........................			100			100			...
Reactor fuel and supplies.......			1,419			1,419			...
Total, supplies and materials.			9,487			8,460			-1,027
31.0 Equipment									
ADP equipment...................			979			797			-182
Other equipment.................			532			488			-44
Equipment depreciation..........			8,426			7,608			-818
Total, equipment...........			9,937			8,893			-1,044

Object Class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount
32.0 Lands and structures...........			$143			$7,643			+$7,500
41.0 Grants, subsidies and contributions									
Total grants, subsidies and contributions................			4,710			2,494			-2,216
Transfer to National Bureau of Standards Working Capital Fund............................			1,454			2,144			+690

National Bureau of Standards
Scientific and Technical Research and Services

CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$25	$30	$30
Management and professional services	110	120	100
Special studies and analyses	296	300	275
Management and support services for research and development	...	...	...
Amount withheld from obligation pursuant to PL 99-190	...	-45	...
Total	431	405	405

Consulting and related services used at the National Bureau of Standards are concerned with:

(1) participation at the Organization of International and Legal Metrology (OIML), (2) the review and evaluation of the technical functions and operations of NBS by Boards of Assessment of the National Academy of Sciences and (3) various services and studies related to programmatic research.

NBS participates in meetings of the OIML to provide input concerning the United States' position in international and legal metrology.

Evaluation Panels consider the importance and relative priority of projects, quality of staff, equipment needs, finances, and the relation of the program to the mission of NBS.

The need for consulting and related services stems from the NBS role in dealing with the private sector, professional organizations, and the public sector. Inputs must be obtained from consultants who can bring their individual expertisee to bear and help NBS in assessing its program plans to meet the needs of its customers.

The alternative to these services is to make no attempt to have expertise from sources outside NBS and risk having a poorer working and professional relationship with those in the business of using the products and services offered by NBS.

National Bureau of Standards
Scientific and Technical Research and Services

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	$13	$13	$13	$13
Pamphlets	8	7	8	...
Audiovisuals	7	2	...	...
Total	28	22	21	13

Periodicals

The Bureau now produces only one periodical - The Journal of Research. The Journal of Research of the National Bureau of Standards, issued six times a year, reports NBS research and development in those disciplines of the physical and engineering sciences in which the Bureau is active (physics, chemistry, engineering, mathematics and computer sciences).

Pamphlets & Audiovisuals

The work performed in this category is in continued support of the 1985-86 MBO aimed at strengthening NBS' communications with the business community.

Working Capital Fund, National Bureau of Standards

The operations of the Working Capital Fund -- which encompass all NBS activities except gifts and bequests and the Special Foreign Currency Program -- are reported in a program and financing schedule printed in the President's budget, as well as reflected in the reimbursable amounts throughout this budget. The fund finances the initial cost of work performed by the Bureau and is reimbursed by applicable appropriations and advances or reimbursements from other agencies. A detailed cost accounting system is used to insure that the actual cost of work performed for each job or task is recorded and identified with the appropriate source of financing. In addition to its function as a revolving fund, the Working Capital Fund is also used to handle annual and sick leave on an accrued basis, to acquire equipment as an investment to be recovered through depreciation charges to programs, to distribute indirect costs to programs as overhead, to carry the recoverable costs associated with the production of Standard Reference Materials, and to carry supply inventories until issued for program use.

The schedule below summarizes the total program of the Bureau according to the source of financing. The narrative and tables following contain information concerning the activities of the fund and future investment plans.

Summary of Total NBS Program
(Obligations in thousands)

	1985			1986			1987			
Source and Use of Funds Spent Direct funding	Perm Pos.[1/]	Work Years	Oblig.	Perm Pos.[1/]	Work Years	Oblig.	Perm Pos.[1/]	Work Years	Oblig.	Appropriation Requested
Scientific and technical research services	1,746	1,825	$122,670	1,768	1,833	$126,131	1,625	1,651	$121,854	$123,953
Gifts and bequests	...	...	55	...	...	56	...	...	56	...
Special Foreign Currency program	...	...	1,445	...	...	41	...	...	...	...
Total, direct appropriations	1,746	1,825	124,170	1,768	1,833	126,228	1,625	1,651	121,910	123,953
Reimbursable Funding and WCF Investments										
Research, development and supporting services - Federal Government	943	987	69,373	944	1,026	77,217	944	1,052	78,916	
Calibrations and tests, technical and advisory services:										
Federal Government	34	36	1,309	34	36	1,376	34	38	1,427	
Public and non-Federal Government	146	152	9,973	146	152	10,487	146	158	10,870	
Subtotal, calibrations and tests, technical and advisory services	180	188	11,282	180	188	11,863	180	196	12,297	
Standard reference materials (SRM):										
Sales:										
Government	5	5	299	5	5	311	5	5	330	
Public	78	82	4,943	78	82	5,143	78	87	5,450	
Subtotal, sales	83	87	5,242	83	87	5,454	83	92	5,780	
Investment of WCF in production materials	6	6	380	6	6	396	6	6	420	
Subtotal, SRM	89	93	5,622	89	93	5,850	89	98	6,200	
WCF investments and operating adjustments	...	...	4,918	...	...	2,102	...	...	2,144	
Total, WCF	1,212	1,268	91,195	1,213	1,307	97,032	1,213	1,346	99,557	
Total, NBS program	2,958	3,093	$215,365	2,981	3,140	$223,260	2,838	2,997	$221,467	

1/ Most NBS Scientists and engineers are not engaged solely on one research project. An individual may divide his time between two or more projects financed by different sources. Also, salary costs of many staff members are charged to an overhead account and subsequently prorated to all directly funded projects. For these reasons, it is not possible to report employment directly for any source of financing. The above are statistically derived numbers based on the estimated work years distribution for Bureau programs.

Working Capital Fund activities

The Working Capital Fund provides for several types of asset investments:

1. General equipment - Investment in equipment having general utility and a relatively long-term useful life. Reimbursement is effected by depreciation charged over the period of useful life to benefiting projects.
2. Standard Reference Materials - Investment in production, analysis, and packaging of a large variety of materials that are certified as to physical characteristics or composition. The fund is reimbursed when the Standard Reference Materials are sold.
3. Supplies - Bureau storerooms carry an inventory of about 11,000 different items of electrical, electronic, chemical, and hardware supplies and materials. These are carried as inventory assets of the Working Capital Fund until they are issued to benefiting projects.

In addition to the cash needed for the foregoing investments, cash is required to cover daily accounts receivable, accounts payable, reserve for leave, and other current assets and liabilities. Management determinations of the amount of equipment, inventory, or Standard Reference Materials investment that can be permitted must, therefore, take into account the available capital, the rapidity of replenishment of the invested capital, and cash needed for current operations.

Available capital

The total capital of the Working Capital Fund on September 30, 1985 was $172.3 million. This capital is made up of the original appropriations for the Fund ($5,000,000); payments and transfers totaling $55.5 million to the Fund from other Bureau appropriations; the value of lands and buildings picked up as donations to the Fund at its inception and later; the undepreciated value of general equipment donated to the Fund at its inception; the value of non-depreciable equipment donated to the Fund; and the value of other donated assets, such as precious stones, the initial storeroom inventory, and the initial Standard Reference Material inventory.

When one is examining the status of the Working Capital Fund for purposes of reviewing the resources available for operations or investments, it is important to recognize that the capital of the Fund consists of more than the original $5,000,000 appropriation. Conversely, not all of the recorded capital of $172.3 million is available for operations or investment. That portion of the total capital that was derived by donation of lands, buildings, precious stones, and non-depreciable equipment cannot be turned into cash through depreciation charges or sales and therefore cannot become available for reinvestment or operating capital. The following table summarizes the total capital by sources, indicating which is available for operations and investment.

Working Capital Fund Summaries
(Dollar amounts in thousands)

	Available for Operations and Investment	Total Investment	Total
Appropriated capital	$5,000	...	$5,000
Transfers from appropriations:			
"Scientific and Technical Research and Services"	51,674	...	51,674
"Construction of Facilities"	3,273	...	3,273
Replacement Surcharge Capital	539	...	539
Land and buildings	...	$89,842	89,842
Donated equipment, not subject to depreciation	...	11,263	11,263
Donated precious stones and metals	...	7,178	7,178
Donated materials, inventories and equipment	3,522	...	3,522
Total, September 30, 1985	$64,008	$108,283	$172,291

As the above table indicates, the total capital which had been available for operations, and which is invested in materials inventories, and for general equipment is $64,008,000. The status as of September 30, 1985 of that portion of the total capital of the Fund is as follows:

		(In thousands)
Invested In: General Equipment		$53,951
Supply inventories		979
Standard Reference Materials		12,598
Irrigation Ditch Stock		6
Current assets:		
Cash	$30,525	
Accounts receivable	21,345	
Advances	86	
Current assets	51,956	
Deduct current liabilities:		
Leave liability	11,123	
Advances from other agencies	27,776	
Other liabilities	16,583	
Current liabilities	55,482	
Net working capital		(3,526)
Total		$64,008

Future investment plans

Following is a summary of the Bureau's plans for further Working Capital Fund investment in 1986 and 1987.

	(Dollar amounts in thousands)	
	1986 Estimate	1987 Estimate
Source of Investment Funds:		
Net working capital	($3,526)	($2,500)
Add: Leave reserve	10,185	10,287
Adjusted net working capital, start of year	6,659	7,787
Increases:		
Transfer from Scientific and Technical Research and Services appropriation	2,102	2,144
Depreciation charges on general purpose equipment	11,100	13,800
Cost of Standard Reference Materials sold	2,282	2,373
Total source of funds	22,143	26,104
Use of Investment Funds:		
Production of Standard Reference Materials (SRM's)	3,141	3,200
Equipment acquisitions during current year	13,402	15,744
Payment of prior year equipment acquisitions and SRM work-in-process	5,600	7,160
Total use of funds	$22,143	$26,104

The amounts to be invested in fiscal years 1986 and 1987 are for the purchase of general equipment and the production of Standard Reference Materials. These investments will be financed by a transfer of $2,102,000 in 1986 and $2,144,000 in 1987 from the Scientific and Technical Research and Services appropriation, and through the recovery of depreciation charges and the costs of Standard Reference Materials that are sold.

Mr. Dwyer. Dr. Ambler, do you have a statement that you would like to make at this time? If so, proceed at your own pace.

STATEMENT OF ERNEST AMBLER, DIRECTOR, NATIONAL BUREAU OF STANDARDS

Mr. Ambler. Yes, sir, I'll make a short statement, if I may.

I am pleased to appear before you again today to request appropriations for the National Bureau of Standards for fiscal year 1987.

The request, as you stated, is $123,953,000. This request includes cost of living increases and built-in adjustments of $3,724,000, program increases of $12,283,000, and program decreases of $16,039,000. In fiscal year 1986, NBS will receive approximately $97 million from reimbursable work done for Federal agencies and for services provided for a fee.

Before I describe our request for fiscal year 1987, I want to explain our situation in 1986. NBS received an appropriation of $123,985,000. As was the case in most other civilian agency programs, reductions of 4.3 percent were allotted to NBS for fiscal year 1986 following the Balanced Budget and Emergency Deficit Control Act. This has meant a reduction of $5,331,000 in the funds available to us. The reductions have been prorated to each of our budget line items and will be achieved without termination of existing research or reduction in force. This strategy is, I believe, Mr. Chairman, consistent with the intent of the legislation.

This is a crucial time for the United States. We are all very much aware of our unsatisfactory trade position and the need for the United States to improve productivity. One component of accomplishing that is developing and applying technology rapidly. Technology is one of the few areas in which this country has an advantage over our competitors. That is why our budget proposal for fiscal year 1987 gives top priority to support for the U.S. economy.

Because our mission of aiding U.S. industry and science is so broad, many people expect NBS to be all things to all people. Operating in the kind of fiscal environment the Federal Government is faced with today, we simply cannot do that. Those of us who have formulated this budget recognize that, and our initiatives focus on the areas where we are likely to have the biggest impact in helping U.S. industry to compete and to do better in international trade.

We are asking Congress for $123,953,000, including Gramm-Rudman reductions, and—we are told—those expected in 1987. This includes increases in several key research programs that are vital to the United States' trade competitiveness.

COLD NEUTRON RESEARCH FACILITY

Our proposal calls for $10 million to establish a national facility for cold neutron research, adjacent to the NBS reactor. Such a facility is critical in advancing materials science and engineering in the United States. This country is behind other nations, particularly Germany, France, and Great Britain, in the development of cold neutron research facilities. About $150 million has been invested in Grenoble, France, for such a facility. Japan recently made a $50 million commitment to establish its own cold neutron facility.

Fortunately, since the NBS reactor is already designed to produce cold neutrons, this is one area where we don't have to match the competition's investment to match a critical research capability.

Secondly, this facility—which has been afforded top priority by a high-level committee of the National Academy of Sciences—will be equipped in part by industry. In fact, we recently signed our first agreement with industry to establish a participating research team using the cold neutron source at the NBS reactor. These kinds of investments mean scores of U.S. companies and universities will have access to this national facility when we build the necessary guidehall.

ADVANCED CERAMICS

We are nearly halfway through the first fiscal year in which Congress has appropriated funds for increased NBS work in advanced ceramics, and we're making good progress. For example, our scientists recently developed a technique that offers ceramics producers a new way to make high technology ceramic powders at low temperatures. We anticipate that this new technique will significantly improve ceramic product reliability and durability. The requested increase of $783,000 will bring our spending for advanced ceramics to the $3 million level. This will permit us to continue our development of critically-needed measurement methods and standards, data, and predictive concepts to assure reliable performance of advanced ceramics.

There's a huge market for advanced ceramics, and if we don't make the effort now to solve the measurement problems which stand in the way of the development of the ceramics, you can be sure our top competitors like the Japanese—who have been working on these problems for years already—will fill the void and take over yet another important market.

FIBER OPTICS

In another area of emerging technology and intense competition, fiber optics, the situation is the same. The fiscal year 1987 request of $950,000 will enable NBS to provide critical measurement technology and services for fiber optics components of modern communications and computer systems.

Fiber optics are the basis for a new industry which uses light and hair-thin glass filaments rather than electricity and copper wire to transmit information. This "lightwave technology" is undergoing rapid international growth. The current world market is more than $1 billion per year and is growing more than 30 percent annually.

The core components of the lightwave communication industry, optical fibers and laser diodes, were invented in the United States. But in what sounds like an all too familiar story, in several important areas our lead is challenged by rapidly-growing international competition. Japan and several European countries are moving ahead to produce and deploy these technologies. To compete successfully, U.S. industry must deliver technically-advanced, cost-effective components and systems and prove their performance and compatibility in the marketplace. Based on our experience, working closely with industry on the optical fibers themselves, we know that today's challenge is to make the measurement advances and provide the services for the other components and systems which send, receive, and process signals sent over the fibers.

CONSOLIDATED SCIENTIFIC COMPUTER SYSTEM

We are requesting $550,000 to enable us to improve the productivity of the Department of Commerce's Consolidated Scientific Computer System. This new supercomputer serves NBS, NOAA, and NTIA. It is already operating 24 hours a day at more than 75 percent of its capacity, after just seven months of operation. Our present staffing levels can provide only minimum user support. To improve the computer's productivity and the productivity of the people using the system, we must hire more computer scientists and systems specialists.

PROGRAM DECREASES

The NBS fiscal year 1987 budget proposes several reductions. Both the NBS Center for Building Technology and the Center for Fire Research will be eliminated, for reductions of $3.1 million and $5.1 million, respectively.

It also proposes a decrease for the Institute of Computer Sciences and Technology of $4.7 million, recognizing the need for greater private sector involvement in this area. We would terminate R&D in several areas and concentrate on standards and guidelines and development activities in areas that support ADP needs of the Federal Government. Our remaining resources would focus on networking, computer security, information management, computer software management, and end user computing.

Other decreases are in the Technical Competence Program, a reduction of $1.5 million, and in the Postdoctoral Research Associate Program of $1.6 million.

This is a time of great budget constraints, as this committee well knows. It is also a time of great trade competition and pressure. I've had good cause lately to try to reconcile these two facts of life. Looking at where we are today and where we want to be—both NBS as an institution and the nation as a whole—one basic fact keeps coming to mind. Our knowledge and technology are this country's major asset and advantage, both in ensuring domestic strength and health and in competing with other nations. That means we have got to make the most of our research resources—our equipment as well as our people.

We have had to make hard decisions on priorities for NBS. The budget before you, including increases to expand certain programs and reductions for others, represents a careful review of those priorities. Facilities like our proposed Cold Neutron Research Facility are crucial, and we give it top priority. I know that this committee recognizes the critical importance of this proposal. I know that there are conflicting views on where the Federal Government should and should not be spending its scarce resources, but I also know that we must find a way for the system to work so that we can move forward with the cold neutron research and other measurement work this nation sorely needs.

Thank you, Mr. Chairman.

[Statement of Mr. Ambler follows:]

STATEMENT BY DIRECTOR, NATIONAL BUREAU OF STANDARDS

ERNEST AMBLER

BEFORE THE HOUSE APPROPRIATIONS COMMITTEE ON THE DEPARTMENTS OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES

Mr. Chairman and Members of the Committee:

I am pleased to appear before you today to request appropriations for the National Bureau of Standards (NBS) in fiscal year 1987.

NBS is requesting an appropriation of $123,953,000. This request includes cost of living increases and built-in adjustments of $3,724,000, program increases of $12,283,000, and program decreases of $16,039,000. In fiscal year 1986, NBS will receive approximately $97 million for reimbursable work done for Federal agencies and for services provided for a fee.

Before I describe our request for fiscal year 1987, I want to explain our situation in FY 1986. NBS received an appropriation of $123,985,000 for this year. As was the case for most other civilian agency programs, reductions of 4.3 percent were allotted to NBS for FY 1986 following the Balanced Budget and Emergency Deficit Control Act. That has meant a reduction of $5,331,000 in the funds available to us. The reductions have been prorated to each of our budget line items and will be achieved without termination of existing research or reduction in force. This strategy is, I believe, consistent with the intent of the legislation.

These hearings come at a crucial time for the United States. This Committee is fully aware of our unsatisfactory trade position. You have appreciated for a long time the need for the United States to improve productivity, and one component of accomplishing that is developing and applying technology rapidly. Technology is one of the few areas in which this country has an advantage over our competitors. That is why our budget proposal for FY 1987 gives top priority to support for the U.S. economy.

Because our mission of aiding U.S. industry and science is so broad, many people expect the National Bureau of Standards to be all things to all people. Operating in the kind of fiscal environment the Federal government is faced with today, we simply cannot do that. Those of us who have formulated this budget recognize that, and our initiatives focus on the areas where we are likely to have the biggest impact in helping U.S. industry to compete and to do better in international trade.

Cold Neutron Research Facility

Our FY 1987 budget proposal calls for $10 million to establish a Cold Neutron Research Facility adjacent to the NBS reactor. This will be a unique national research facility which is absolutely critical in advancing materials science and engineering in the United States. This country is behind other nations, particularly Germany, France, and Great Britain, in the development of cold neutron research facilities. About $150 million has been invested in the Grenoble, France, facility. Japan recently made a $50 million commitment to establish its own cold neutron facility.

Beams of neutrons produced by specially-designed nuclear reactors are one of the fundamental tools of materials science. They are highly penetrating, making it possible to probe deep within materials to observe, for example, micro-cracks or voids. Other common probes, such as x-rays or electron beams, can examine only very thin layers near the surface of materials. "Cold" neutrons' relatively slow speed allows researchers to conduct experiments that are impractical or even impossible with more conventional neutron beams.

I want to make two points about our proposal. Fortunately, since the NBS reactor is designed to produce cold neutrons, this is one area where we don't have to match the competition's investment to match a critical research capability. In fact, several of our planned cold neutron stations will clearly exceed European and Japanese capabilities. NBS has the only research reactor in this country which will allow the installation of a cold neutron source large enough to handle the array of instruments and work stations which U.S. researchers need. That means the U.S., with a relatively modest investment, can take a step to keep pace with the competition in a race not just for scientific and technological advancement, but in a race to come up with new and improved products.

A second point needs to be made. This facility, which has been accorded top priority by a high-level committee of the National Academy of Sciences, will be equipped in part by industry. In fact, we recently signed our first agreement with industry to establish a participating research team using the cold neutron source at the NBS reactor. These kinds of investments mean scores of U.S. companies and universities will have access to this national facility when we build the necessary guidehall.

Advanced Ceramics Increase

We are nearly half-way through the first fiscal year in which Congress has appropriated funds for increased NBS work in advanced ceramics, and we are making good progress. For example, our scientists recently developed a technique that offers ceramics producers a new way to make high-technology ceramic powders at low temperatures. We anticipate that this new technique will significantly improve ceramic product reliability and durability. This year, we are requesting an increase of $783,000 to bring our spending for advanced ceramics to the $3 million level. This will permit us to continue our development of critically needed measurement methods and standards, data, and predictive concepts to assure reliable performance of advanced ceramics.

This new generation of materials, which is particularly well-suited for high technology applications, possesses unique properties, especially resistance to corrosion, high temperatures, and wear. Advanced ceramics open up an array of applications in advanced heat engines, cutting tools, sensors, biomedical devices, and electronic and optical components. But the inability to control production processes so that ceramic products possess uniform and predictable performance characteristics remains a major obstacle. Our FY 1987 request would bolster our efforts to address the measurement problems which make up a large part of that barrier.

There's a huge market for advanced ceramics. If we don't make the effort now to solve the measurement problems which stand in the way of the development of ceramics, you can be sure our top competitors, like the Japanese--who have been working on these problems for years already--will fill the void and take over another important market.

Fiber Optics Increase

In another area of emerging technology and intense competition, fiber optics, the situation is the same. The FY 1987 request of $950,000 will enable NBS to provide critical measurement technology and services for fiber optics components of modern communications and computer systems.

Fiber optics are the basis for a new industry which uses light and hair-thin glass filaments rather than electricity and copper wire to transmit information. This "lightwave technology" is undergoing rapid international growth because of its advantages and recent advances. The current world market is more than $1 billion per year and is growing more than 30 percent annually.

The core component of the lightwave communication industry, optical fibers and laser diodes, were invented in the United States. But in what sounds like an all-too-familiar story, in several important areas our lead is challenged by rapidly growing international competition. Japan and several European countries are moving ahead to produce and deploy these technologies. To compete successfully, U.S. industries must deliver technically advanced, cost-effective components and systems and prove their performance and compatibility in the marketplace. Based on our experience working closely with industry on the optical fibers themselves, we know that today's challenge is to make the measurement advances and provide the services for the other components and systems which send, receive, and process signals sent over the fibers. Those are measurement advances and services that are needed right now and in the future.

Consolidated Scientific Computer System Increase

We are requesting $550,000 to enable us to improve the productivity of the Department of Commerce Consolidated Scientific Computer System. This new supercomputer, which is serving NBS, the National Oceanic and Atmospheric Administration, and the National Telecommunications and Information Administration, is already operating 24 hours a day at more than 75 percent of its capacity after just seven months of operation. But present staffing levels are adequate enough to provide only minimum user support. To improve the computer's productivity and the productivity of the people using the system, we must hire more computer scientists and systems specialists. This will reduce computing time for long problems, assure compatibility of existing hardware, and offer other advantages. Experiences at several successful supercomputing centers in government and industry underscore the need to augment basic operation staff, which we now have, with expert computer scientists and systems analysts if we are to realize the full potential of the supercomputer. Congress and the Department have made the basic investment in Consolidated Scientific Computer System; I hope we now can get the resources needed to make the best possible use of this investment.

Budget Decreases

The NBS FY 1987 budget proposes several reductions. Both the NBS Center for Building Technology (-$3.1 million) and the Center for Fire Research (-$5.1 million) would be eliminated. The Federal government has invested a total of nearly $100 million in these two programs over the past 10 years, and it now is appropriate for this effort to be assumed by the private sector and State and local governments.

The NBS FY 1987 budget also proposes decreases for the Institute for Computer Sciences and Technology (-$4.7 million), recognizing the need for greater private sector involvement in this area. We would terminate research and development work in several areas and concentrate standards and guidelines development activities in areas that support ADP needs of the Federal government. Our remaining resources would focus on networking, computer security, information management, computer software management, and end user computing.

A decrease of $1,500,000 is requested for the Technical Competence Program. This amount represents the average annual rate of turnover of projects in this program and would not result in interruption to ongoing research or separation of personnel. Since 1976, $44.0 million has been devoted to this fund. These resources have been used by NBS to help alleviate the problem which led to the creation of the fund.

A decrease of $1,641,000 is requested in NBS' Postdoctoral Research Program. NBS will focus its recruiting more on particular high priority programs such as ceramics, biotechnology, and electronics and reduce the degree to which it relies on the general recruiting mechanism of the postdoc program. The reduced program will permit the eventual award of about 8 new two-year fellowships per year for a total of 16. The Industrial Research Associate and Graduate Cooperative Education programs remain unaffected.

National Bureau of Standards

CONSOLIDATED SCHEDULE OF AVERAGE GRADE AND SALARY

	1985 Actual	1986 Estimate	1987 Estimate
Average ES salary	$67,944	$67,944	$67,944
Average GS grade	10.94	10.97	10.95
Average GS salary	$37,464	$37,490	$36,229
Average salary of ungraded positions	$24,873	$24,855	$24,853

Cooperation in Research and Development

This is a time of great budget constraints, as this Committee well knows. It also is a time of great trade competition and pressure. I've had good cause lately to try to reconcile these two facts of life. Looking at where we are today and where we want to be--both for NBS as an institution and the Nation as a whole--one basic fact keeps coming to mind. Our knowledge and technology are this country's major asset and advantage, both in ensuring domestic strength and health and in competing with other nations. That means we have got to make the most of our research resources--our equipment as well as our people. Cooperation in research and development is one obvious answer. This is something that we at NBS have been doing right from the start. We have made cooperation with industry a way of doing business, and we have served as a model for cooperative arrangements which are becoming more popular today as industry, universities, and government form research partnerships all across the country. We are using cost-sharing arrangements with others whenever and wherever possible. Last year at these hearings I gave you some examples of our enhanced cooperative R&D.

Technology Transfer

But cooperation in R&D won't be enough. Doing the research is only half the battle. The results of this research must be incorporated into new ideas, new processes, and new products. New technology must diffuse throughout our industries, and diffuse more rapidly than it does now. We need to think about cooperation in the transfer and diffusion of technology in the same way that we have addressed cooperation in research and development.

NBS is taking a lead here, too. We spend a good deal of time with visiting scientists, engineers, and managers from industrial firms. About 200 of these specialists work at NBS each year as research associates, with their sponsoring organizations paying their salaries. They come to NBS to conduct research, but they also come to learn how they can put our work to use.

We have taken other steps to encourage technology transfer, by holding literally hundreds of conferences, workshops, and seminars each year, by encouraging our staff to publish results of their work as broadly as possible, and by working actively with professional and technical societies and standards organizations. We are using videotapes to explain our research so that others can take advantage of our work. We now are making many of our databases and expertise available through computers, and we are considering expanding this service so that industry will be able to tap into even more of our information.

We are looking for new outlets, new ways to disseminate our research results and services throughout the U.S. economy. And I am convinced that as a Nation we must all join together to develop creative ways to transfer technology, just as we now seem to be developing the capacity to conduct research together. There isn't much choice if we want this country to be competitive in a changing world economy.

I stress the importance of cooperative R&D and technology transfer because I see it as a way for us to deal with the dual problem of tight federal budgets and growing trade deficits. I stress it, too, because I want to emphasize how the nation's investment in the work of the Bureau will yield greater dividends because of our emphasis on cooperative activities.

We have had to make hard decisions on priorities for NBS. The budget before you, including increases to expand certain programs and reductions for others, represents a careful review of those priorities. Facilities like our proposed Cold Neutron Research Facility are crucial. We give the facility top priority in our FY 1987 request. I know that this Committee recognizes the critical importance of this proposal. I know that there are conflicting views on where the Federal government should and should not be spending its scarce resources. But I also know that we must find a way for the system to work so that we can move forward with the cold neutron research and other measurement work this nation sorely needs.

Thank you, Mr. Chairman and Members. I will be pleased to answer any questions that you have.

Mr. **Dwyer**. Thank you, Doctor.

GRAMM-RUDMAN-HOLLINGS REDUCTION

How are you managing to sustain a reduction of $5,331,000 in fiscal year 1986 as a result of the Gramm-Rudman reduction?

Mr. **Ambler**. Well, as I mention in my testimony, we are prorating it among all the line items in the budget. We are going to slow down the rate of hiring and we're going to cut back in other object expenses, and by doing this we do not expect to have to go into any reductions in force as a direct result of that legislation.

Mr. **Dwyer**. Will you require any reprogramming to accomplish this?

Mr. **Ambler**. No, sir.

Mr. **Dwyer**. For the record—you will provide the answer for the record—the 1986 appropriation act restored funding proposed for a reduction for the Center for Building Technology, the Center for Fire Research, and the Institute for Computer Sciences and Technology. We want you to provide for the record what specific activities are being conducted in these areas in fiscal year 1986.

Mr. **Ambler**. Yes, sir.

[The information follows:]

FY 1986 Activities of CBT, CFR, and ICST

The Center for Building Research conducts activities in the areas of structural engineering; earthquake engineering; building materials engineering; building physics; building equipment; and computer integrated construction.

The Center for Fire Research conducts activities in the areas of fire modeling; flammability and toxicity measurement; and exploratory fire research.

The Institute for Computer Sciences and Technology conducts standards and guidelines development activities in the areas of software management, end user computing, security, information management, networking, input/output interfaces, advanced computer measurements and storage media.

FY 1986 ACTIVITIES OF CBT, CFR

	NBS Research ($K)	Grants ($K)	Total ($K)
o CENTER FOR BUILDING TECHNOLOGY			
Structural Engineering (incl. Earthquake Engineering)	1,025 (475)		1,025 (475)
Develops the measurement basis for structural safety standards in the United States. Utilizes computer based techniques for predicting structural safety and provides the technological basis for improved seismic design criteria for buildings.			
Building Materials Engineering	385		385
Develops fundamental data on building materials properties, and laboratory and field test methods for predicting service lives of building and construction materials such as concrete, roofing systems, and protective coatings for steel, and for use in quality assurance.			
Building Physics	750		750
Develops nationally acceptable database measurement techniques, test methods, and models for the design, construction, and operation of building envelopes and mechanical, lighting, and acoustical systems that will result in a significant reduction in the cost of operating buildings and a significant increase in the international competitiveness of the U.S. building industry.			
Building Equipment	940		940
Develops data, test methods, and models that can be adopted in consensus standards for the design and operation of building mechanical and electrical systems. Also, develops software performance criteria, interface standards, and test methods needed for the Nation's building industry to make effective use of modern computer-aided design hardware and software, and database management systems.			
TOTAL	3,100		3,100
o FIRE SAFETY TECHNOLOGY			
Fire Simulation	310	30	340
Integrates models and necessary data into fire simulation and prediction techniques, and demonstrates their application to answering fire safety questions.			
Compartment Fire Modeling	240	140	380
Develops benchmark fire growth computer code for describing fire development in one or more rooms.			
Fire Growth & Extinction	540	750	1,290
Develops predictive methods to describe the comprehensive dynamics and elemental processes of fire growth and extinction.			
Hazard Analysis	340	160	500
Develops research models and associated computer codes to predict fire hazard development and people movement in buildings and to analyze fire risk.			

o FIRE MEASUREMENT & RESEARCH

Exploratory Fire Research Develops scientific knowledge of fundamental fire phenomena down to the molecular level.	711	580	1,291
Flammability & Toxicity Measurement Develops measurement methods and the underlying principles for characterizing combustibility, and the impact of combustion products on living organisms.	320	290	610
Fire Performance & Validation Develops the methodology to assess the accuracy of fire models and designs experiments to evaluate, on a realistic scale, the fire performance of assemblages.	680	50	730
TOTAL	3,141	2,000	5,141

1987 AUTHORIZATION

Mr. **Dwyer**. Now, in connection with your 1987 budget request, what's the status of your reauthorization for fiscal year 1987?

Mr. **Ambler**. We've had our hearings in the House, Mr. Chairman. We're scheduled to have them in the Senate April 10th, I think it is. April 15th, excuse me.

Mr. **Dwyer**. And you anticipate a bill being reported in the House—when? Did you get any indication of when you might expect the bill?

Mr. **Ambler**. No, sir, we don't have any idea.

PROGRAM STRUCTURE CHANGE

Mr. **Dwyer**. You're proposing to merge the Fire Research Subactivity into Engineering Measurements and Standards Subactivity. If the Congress restores the funding for this activity, which you have proposed to eliminate, will you still maintain this consolidation?

Mr. **Ambler**. Yes, we would, sir. It's not related to that.

ADVANCED CERAMICS

Mr. **Dwyer**. Your requested increase of four positions and $783,000 for polymer and ceramic sciences—does this complete the total level of requests to construct a base figure in your research mode for advanced ceramics for 1987 and beyond?

Mr. **Ambler**. That brings it to $3 million and—yes, that brings the program up to full strength.

Mr. **Dwyer**. Full strength.

MATERIALS CHARACTERIZATION

The justifications on page 31 state that you will complete neutron scattering measurements of critical properties of newly-developed materials for low cost, high efficiency permanent magnets. I understand that General Motors is now conducting the same type of research in a cooperative agreement with the national laboratory at Ames, Iowa, for the same type of application to be used in automobile generators. Will this be a duplication of effort?

Mr. **Ambler**. No, sir. The work at our reactor cannot be duplicated at Ames. The particular measurements that we're making on these alloys require the kind of neutron facility that we have.

ADVANCED CERAMICS

Mr. **Dwyer**. Going back to your polymer and ceramics sciences activity, how much research is being conducted in other areas besides the Bureau of Standards?

Mr. **Ambler**. You mean in the country as a whole?

Mr. **Dwyer**. Yes, in the country as a whole.

Mr. **Ambler**. I don't know that we have those figures with us. We'd be glad to supply it for the record. We have that information, I'm sure.

Mr. **Dwyer**. Well, that would be great if you would supply it for the record.

[The information follows:]

CERAMICS RESEARCH IN THE UNITED STATES

The U.S. effort in advanced ceramics has been slowly growing, partially in response to the focused program in Japan to dominate this new, high technology market which is forecast to grow five fold to over $30 billion by year 2000. The U.S. effort of $23.8 million in FY 1984 consists of 1) basic research supported by DOE, NSF, NASA, industry and universities; 2) technology development supported by the mission agencies and industry; and 3) technology infrastructure principally performed at NBS.

The major technical barrier impeding competitive commercialization of advanced ceramics is the inability to produce components reliably and reproducibly. The NBS program addresses these issues through a measurement-based program designed to understand, predict, and control the origin and fate of these performance-limiting features and to establish those critical linkages between processing variables, microstructure, materials properties and performance, that will markedly improve ceramic reliability.

The technology infrastructure being established in this Advanced Ceramic program includes development and calibration of nondestructive evaluation techniques to detect flaws introduced in the production process, critical evaluation of ceramic phase diagram data which enables industry to improve control over processing conditions, certification of reference materials to be used by industry to improve reliability, and development of measurement methods and theories for predicting the properties and performance of advanced ceramics. Developing the infrastructure will accelerate the rate of U.S. technology advances and thereby enhance U.S. competitiveness in this industry.

The uniqueness of our program is maintained by our extensive interactions with industries, universities and other agencies through collaborative research, hosting Industrial Research Associates, Guest Workers and University Faculty and participation on National committees such as the DOE-NBS-NASA BiMonthly Coordinating Committee on Ceramics, the Government Interagency Coordinating Committee on Ceramics, and the COMAT Subcommittee on Ceramics.

ADVANCED CERAMICS EFFORTS

Mr. **Dwyer**. Are there any duplications going on, do you think?

Mr. **Ambler**. I'm not aware that there are duplications. The overall—I don't quite remember what the overall level of effort is nationally. The kinds of things that companies do and we do are very different. We deal more with fundamental measurements and providing information on things like phase diagrams, which they use then in designing the particular ceramics. So we don't get into actually developing particular ceramics, and we don't get into fabricating special shapes or compositions for specific purposes. So there's a great deal to be done, and the field is moving very fast.

FIBER OPTICS

Mr. **Dwyer**. You requested an additional $950,000 and eight permanent positions for electronic and electrical measurements. This request is essentially for work on fiber optics. The continuing resolution last year provided grants to the Rochester Institute of Technology and to Iowa State University to do basic research on fiber optics.

Is this in any way related to that research, and can you justify this research as supplementary to those particularly Federally-funded efforts?

Mr. **Ambler**. I don't know that our work is more related to that than it is related to many others who are working in this field of fiber optics, and there are some very big companies in this country doing that, as you know, Mr. Chairman. The kinds of things that we do, though, are unique and they are things that only the National Bureau of Standards can do. As you know, with these optical communications systems—you can think of them by analogy, say, with microwave systems—there are components, there are systems that transmit the signals, systems that modulate the signal, the fibers themselves which conduct the signal, and then there are detectors at the other end. And all of those things have to be specified and measured very critically, and it's that measurement base that we propose to provide. And it will be useful to everybody.

CENTER FOR BUILDING TECHNOLOGY

Mr. DWYER. You are proposing elimination of Building Technology for fiscal year 1987. If we were in a non-deficit situation, would you consider this enough of a national responsibility and priority to request funding to support the Center for continuation in 1987?

Mr. AMBLER. I don't know that I can answer that directly. It is, if I may say so, a little bit hypothetical. But if I gave you the answer as to why we are proposing it, perhaps it would be a satisfactory response.

Certainly, the fact that we're in a deficit situation and we have to limit our budgets is an important factor; but at the same time, I think a critical factor is the trade situation, the competitive situation of U.S. industry, and I think the position of the Department of Commerce in all this—of all cabinet departments, it seems to have a direct responsibility when it comes to those issues. And the Bureau of Standards in particular, because it is the main laboratory of the Department of Commerce, has a responsibility to deploy its resources to meeting the Bureau's own mission as stated in the act, and also the Commerce mission.

So what we're faced with is the need to prioritize and taking into account the most fundamental and important missions of the Bureau and the Department, that's the way it all comes out.

CENTER FOR FIRE RESEARCH

Mr. DWYER. Well, would the same thing apply to the Center for Fire Technology?

Mr. AMBLER. Yes, it would, sir.

Mr. DWYER. So basically, if I could paraphrase what you said—correct me if I'm wrong—if you had your druthers, you'd rather have these centers; but given the situation, you have to establish a different set of priorities, and this way they——

Mr. AMBLER. Well, I'm not sure that's the way I'd put it. In addition to that, we have been working in these areas of fire and building for a long time, and the basic responsibility for the safety aspects related to fire and building structures resides, of course, with code officials, who are State and local. So with the assumption of the States of that responsibility, it seems to me that there goes some obligation to be responsible for that kind of activity.

But I really would—if you don't mind—not answer your question directly because to me it seems to presuppose that there is an unlimited amount of money, which I don't believe is ever going to occur.

INSTITUTE FOR COMPUTER SCIENCES AND TECHNOLOGY

Mr. **Dwyer**. You requested, again, a reduction of $4,657,000 and 35 positions related to the Computer Sciences and Technology Subactivity, which essentially involves the Institute of Computer Science and Technology. If we were not in a deficit situation, do you feel that you would request funds for this activity to continue work in 1987?

Mr. **Ambler**. Well, what has happened in this case, the Institute for Computer Science and Technology has been, I think, very successful over the last three or four years in the area of computer standards. You are probably aware yourself, from your own experiences, one of the biggest problems we have is connecting computers together and having them talk together and transmit information. And this whole subject of standards for doing that interface is tremendously important, not only nationally but internationally, and it's very expensive to have to deal with that without adequate standards.

The Institute for Computer Science and Technology has provided a great deal of leadership there, and in particular they've been successful in getting involved not only the manufacturers of computers, the hardware manufacturers, but the users—the bankers and the insurance companies and the business interests who really have a problem. And they're now participating in standards writing groups. So the amount of activity that's going on now in private sector standards writing groups has increased substantially. The mainframe manufacturers have appreciated what the needs are and the pressures are from their customers to the extent that they've recently formed what they call a Committee on Open Systems, and 17 of the top U.S. manufacturers have banded together and they're going to raise funds to support that effort of systems interconnections.

So I think there's been a change there, if I might say so, a more of a structural kind in the way things are getting done in that area.

FIRE AND BUILDING RESEARCH

Mr. **Dwyer**. Going back to the Centers for Fire Research and Building Technology for just a moment, in your budget that you submitted to OMB, had you requested funding for these two activities?

Mr. **Ambler**. No, sir, they were not in the request to OMB.

Mr. **Dwyer**. You had not requested money for these activities?

Mr. **Ambler**. That is correct.

Mr. **Dwyer**. We had the State Department in here earlier this week. Now, are you assisting the State Department in any way in connection with their building program, these two agencies?

Mr. **Ambler**. You mean, with respect to their embassies and things like that?

Mr. **Dwyer**. Yes.

Mr. **Ambler**. Not to my knowledge, sir.

Mr. **Dwyer**. It has been indicated during previous hearings that the State Department has been carrying on discussions with the

Bureau regarding the possibility of working into their building program, and I thought you might be familiar with that.

Mr. **Brown**. Mr. Chairman, we have——

Mr. **Smith**. Would you give your name for the record?

Mr. **Brown**. I am Mark Brown; I'm the Commerce Budget Officer.

Within ITA and the Department of Commerce, we do have funds for the State Department for work on overseas facilities.

Mr. **Dwyer**. Well, we are talking about these two agencies that are about to be abolished, and they were specifically mentioned, as I recollect.

Mr. **Brown**. No, sir, I have no knowledge that we will participate with State.

[The information follows:]

Assistance to State Department Building Program

NBS subsequently determined that minor consulting services are being provided to the State Department regarding physical security criteria and specialized fire safety issues. These services have been performed on a non-reimbursable basis.

COLD NEUTRON RESEARCH FACILITY

Mr. **Dwyer**. You requested an increase of $10 million for a cold neutron research hall related to the program for which funds were provided to initiate a cold neutron research program in fiscal year 1985. If your budget were approved as submitted, would not the reductions in the areas of building technology, fire research, and computer sciences provide additional space in which you could reorganize and relocate some of your resources in order to accommodate the research-related activities for the cold neutron program?

Mr. **Ambler**. No, sir. The space for the cold neutron program is very special laboratory space, for one thing, but for another thing it has to be placed right next to the reactor; it has to be built, in fact, adjacent to the reactor. The reason is—the money that you appropriated for the cold neutron source gives us the cold source in the middle of the reactor itself, and we are presently getting on with getting that installed. Then the cold neutrons come out, and inside the reactor building there is only space for two experimental stations, so that hardly can be a national facility as it should be, so that we need more space. And what we have to do is to build special guides that will guide the beams of neutrons through the wall—we'll have to drill holes through the wall outside—then there will be a building which has to be, as you can imagine, a very special purpose building—right there to house these other 15 stations that we hope to provide for all people throughout the country.

Mr. **Dwyer**. What's the total cost of the hall expected to be?

Mr. **Ambler**. The total cost—I think it's over about a four-year life—we've estimated to be about $27 million. Now, let me say that with the exchange rates going as they are, since we have to buy some components overseas, and we actually haven't had the architectural and engineering study complete yet, I wouldn't like to be pinned down to that figure. But our best estimate for the total period is $27 million.

Mr. **Dwyer**. How about the annual operating cost of this hall?

Mr. **Ambler**. It's at $3 million.

Mr. **Dwyer**. Okay, Doctor, we'll have some questions that we'll submit to you and you please submit the answers for the record. Thank you.

[Questions for the record follow:]

Questions for the Record by Congressman Dwyer

Center for Building Technology

QUESTION:

Where do you expect the funds to come from and who do you expect to do the work in this area in the absence of the leadership provided by the National Bureau of Standards in 1987?

ANSWER:

It is the National Bureau of Standards view that the private sector and State and local governments should fund the continuation of the work conducted by the Center for Building Technology, and I believe to the extent that the private sector and State and local governments need the research, they will fund it. The reasons for this are that the private sector has economic incentives to assure improved building safety and building regulations and safety are traditionally overseen by State and local governments.

Center for Fire Research

QUESTION:

Are there still reasonable and real objectives to pursue for this program?

ANSWER:

It is the National Bureau of Standards view that once Congress agrees to discontinue direct federal funding for this program, the likely sponsors of fire research--the private sector and State and local governments--will determine future objectives. It is our belief that the value of fire research will be determined by the marketplace once the demands placed upon it by the private sector and State and local governments are no longer subsidized by the Federal government.

QUESTION:

Who do you feel will conduct this research and where do you feel the funds could come from in the absence of activities and leadership from the National Bureau of Standards for fire research in 1987?

ANSWER:

It is the National Bureau of Standards view that the private sector and State and local governments should fund the continuation of the work conducted by the Center for Fire Research, and I believe to the extent that the private sector and State and local governments need the research, they will fund it. The reasons for this are that the private sector has economic incentives to improve fire safety and that fire safety is traditionally overseen by State and local governments.

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Institute for Computer Sciences and Technology

QUESTION:

What activities in 1987 could be accomplished by ICST if funding remained at the same level as that of 1986?

ANSWER:

Currently, ICST conducts standards and guidelines development activities in the areas of software management, end user computing, security, information management, networking, input/output interfaces, advanced computer measurements and storage media. These activities would continue in 1987 if funding remained the same.

QUESTION:

Do you feel that these activities would be carried out in the absence of such funding by private groups and organizations? What specific groups would contribute funding or carry out this activity in the absence of funding at the 1986 level as your budget would provide? Address briefly the reimbursable program related to the computer sciences and technology program and what type of research you conduct and what type of service you perform for the Department of Defense totaling $3,400,000.

ANSWER:

NBS has been encouraging the private sector to form a cooperative research organization to address OSI standards. The Corporation for Open Systems (COS) that was formed recently accelerates the development and testing of products based on OSI standards. COS is a consortium of approximately 20 companies, including IBM, AT&T, Burroughs Corporation, Control Data Corporation, DEC, Honeywell, NCR, Sperry, Wang and Xerox. This consortium will coordinate its member companies efforts in standards implementation, testing and certification. It will work through established standards bodies to expedite the development of standards, and will work to establish a single set of test methods and certification procedures internationally. Membership in COS is open to vendors and users of computer and telecommunications products and services.

ICST's reimbursable program has been increasing steadily since approximately FY 1983. Close contact is maintained with other Federal agencies to determine their agency requirements for standards and guidelines and then to conduct research, develop and provide standards and advisory services as well as provide direct technical assistance to individual agencies.

In FY 1987, it is anticipated that ICST will provide assistance to DoD in such areas as networking, communications protocols, security, software management and engineering, high performance computing, automated speech recognition, and will provide DoD with technical assistance for its computer-aided logistics support.

Competence Program

QUESTION:

Discuss the proposed decrease of $1,500,000 related to the technical competence program. How will this affect the level of service and research in 1987?

ANSWER:

This reduction represents the average rate of turnover in projects in this program and will not result in interruption to the ongoing research.

Postdoctoral Research Program

QUESTION:

Discuss the proposed decrease of $1,641,000 related to the postdoctoral research program. How will this affect the overall research level and how will it affect your ongoing program activities if discontinued?

ANSWER:

The proposed decrease of $1,641,000 will not permit the appointment of any new postdocs in FY 1987. However, we do intend to fully honor our commitment for the second year term of all FY 1986 appointments. In future years, at the reduced level of funding, we will award approximately 6-8 new two-year fellowships per year. We will focus additional recruiting on those targeted areas represented by the requests for increases in our FY 1987 budget, i.e., fiber-optics, ceramics, cold neutron, etc.

FRIDAY, MARCH 21, 1986.

NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

WITNESSES

RODNEY L. JOYCE, ACTING ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION

DENNIS R. CONNORS, DIRECTOR, OFFICE OF POLICY COORDINATION AND MANAGEMENT

SARAH VOGEL, BUDGET OFFICER

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. Next will be the National Telecommunications and Information Administration. Here to testify is the Acting Assistant Secretary of NTIA, Rodney Joyce.

[The justifications follow:]

U.S. DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION

Budget Estimates, Fiscal Year 1987
Congressional Submission

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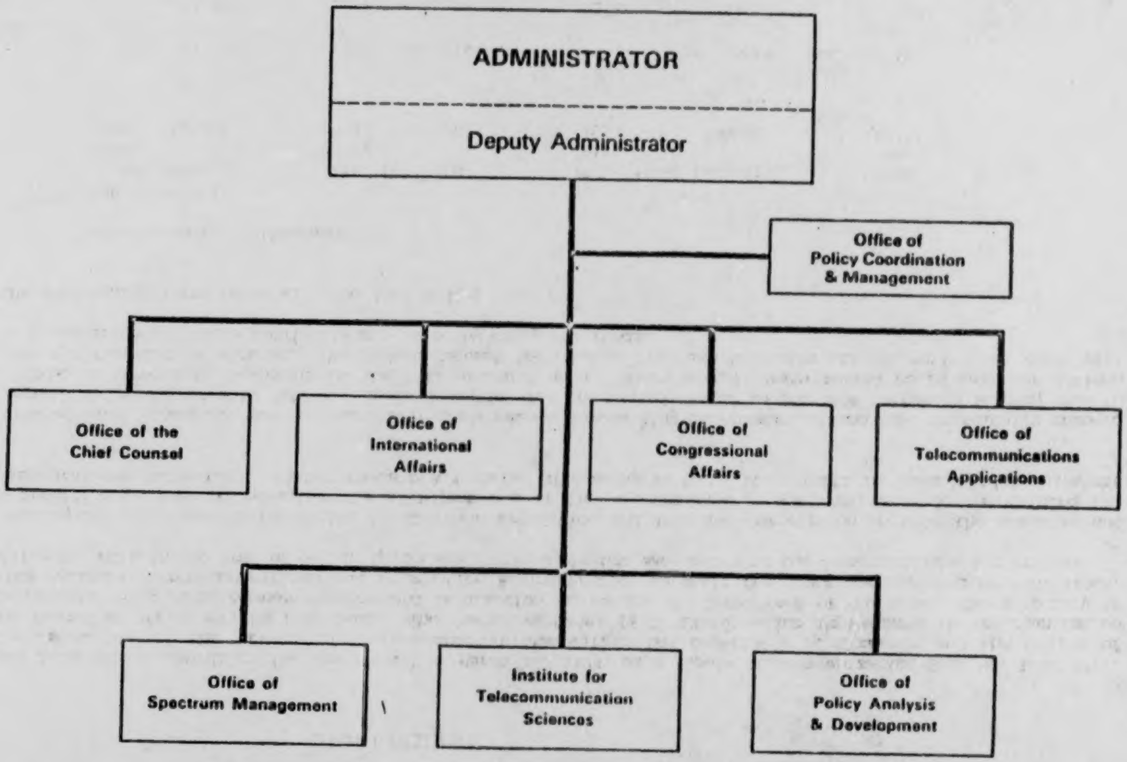
U.S. DEPARTMENT OF COMMERCE
National Telecommunications and Information Administration


ADMINISTRATOR
Deputy Administrator
Office of Policy Coordination & Management
Office of the Chief Counsel
Office of International Affairs
Office of Congressional Affairs
Office of Telecommunications Applications
Office of Spectrum Management
Institute for Telecommunication Sciences
Office of Policy Analysis & Development

NTIA-1

GENERAL STATEMENT

The National Telecommunications and Information Administration was formed on March 26, 1978, as a result of Reorganization Plan No. 1 of 1977. The reorganization combined the resources of the Office of Telecommunications within the Department of Commerce and the Office of Telecommunications Policy from the Executive Office of the President. The Executive Order (E.O. 12046) which implemented the reorganization provides a broad national and international role on telecommunications and information issues for the Department of Commerce. The Secretary of Commerce, therefore, established the National Telecommunications and Information Administration to staff the functions assigned by E.O. 12046. Congress has also added responsibility for NTIA in the area of public telecommunications through amendments to the Communications Act of 1934.

NTIA's broad goals include: (1) developing and advocating policies to decrease regulation and increase competition in both the domestic and international market places; (2) providing policy and managing the efficient use of the electromagnetic spectrum, and (3) maintaining the U.S. leadership position in telecommunications technology. Within these broad goals, NTIA seeks to focus its efforts in areas with the greatest potential for productive change.

Since NTIA's establishment, the international, domestic, and technological environments surrounding telecommunications have drastically changed and will continue to advance and expand in the foreseeable future. It is essential for the United States to continue to take a leading role in adapting to these rapid changes. This is especially important in the international arena, where overall Departmental goals call for actions to encourage the development of open and competitive markets. The budget request includes an increase for international activities which will allow NTIA to maintain the level of international efforts previously supported by carryover funds.

The following is a comparison of the 1986 appropriated level with the 1987 budget request:

(Dollar amounts in thousands)

	1986 Currently Available		1987 Estimate		Inc. (+) or Dec. (-)		Perm. Emp. 12/31
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	
Appropriations							
Salaries and Expenses..................	199	$13,400	196	$13,916	-3	+$516	196
Public Telecommunications Facilities, Planning and Construction...........	12	24,000	...	...	-12	-24,000	10
Total................................	211	$37,400	196	$13,916	-15	-$23,484	206

Appropriation Summary Statement

Appropriation: Salaries and Expenses

The FY 1987 budget request of $13,916,000 for this appropriation represents an increase of $516,000 over the 1986 currently available amount of $13,400,000. This amount consists of a $100,000 decrease associated with A-76 Productivity Savings, a $450,000 decrease associated with the non-recurring cost of software conversion, assorted adjustment-to-base increases of $566,000 and a $500,000 programmatic increase.

The "Domestic, Federal and International Policies" activity develops policies aimed at promoting diversity of services, effective competition, and deregulation to the extent feasible in the telecommunications and information (T&I) industries. Within the Government, this activity develops policies to foster efficiency and effectiveness in the development and use of telecommunications services by Federal agencies. This activity also formulates and advocates policies to enhance U.S. industry's ability to compete in international T&I markets and services and additionally, protects and promotes U.S. interests in the planning and management of international T&I facilities and services. For FY 1987, NTIA is proposing a continuation of the Domestic and Federal Policies subactivity at the current level and $500,000 in new funds to support and augment the International Policies subactivity. The role of the International Policies subactivity has expanded over the last years resulting from the increasing importance telecommunications plays in the international arena. Since FY 1984, NTIA has been able to utilize carryover funds to sustain these international efforts to the extent possible. However, after FY 1986, all carryover funds will be depleted. This makes it necessary for NTIA to receive an increase in funding in order to maintain these vital activities.

The "Spectrum Management" activity develops policies and manages the Government's use of the radio spectrum so that this use, in both the long and short terms, is effective, efficient, equitable and responsive to national and international requirements. In cooperation with the Federal Communications Commission (FCC), it plans long-range management of the entire national radio spectrum resource, coordinates national positions with the FCC and Department of State and develops Government policies for international negotiations on spectrum planning and regulation. For FY 1987, both the Spectrum Plans and Policies and the Spectrum Management, Analysis and Operations subactivities will continue at the current level.

The "Telecommunication Sciences Research" activity conducts applied research and analysis as a basis for improving the efficiency of spectrum use. It assesses and develops domestic and international technical performance standards to facilitate competition in the provision of enhanced telecommunications products and services. Additionally, analytical methods and automated models will be employed to assist in the development of credible and defensible positions before international conferences and committees. For FY 1987, both the Spectrum Research and Analysis subactivity and the Systems and Networks Research and Analysis subactivity will continue at the current level.

Appropriation Language and Code Citations:

1. For necessary expenses, as provided for by law, of the National Telecommunications and Information Administration,

15 U.S.C. 272
15 U.S.C. 1512
47 U.S.C. 305
47 U.S.C. 391
47 U.S.C. 606
47 U.S.C. 721

15 U.S.C. 272 authorizes the Secretary of Commerce in the investigation of conditions which affect the transmission of radio waves, compilation and distribution of information on the transmission of radio waves for use in frequency assignments.

15 U.S.C. 1512 authorizes the Secretary of Commerce to foster, promote and develop foreign and domestic commerce. The telecommunications industry is both an integral part of the Nation's commerce and a key mechanism on which much of the work relies. Activities undertaken by the Secretary to improve our telecommunications industry relate directly to the Secretary's mandate under 15 U.S.C. 1512.

47 U.S.C. 305 provides the authority to develop and set forth plans, policies and programs with respect to telecommunications for frequency assignment and allocation.

47 U.S.C. 391 as amended by The Public Broadcasting Amendments Act of 1981, (P.L. 97-35) authorizes the Secretary of Commerce to use appropriated funds for the administrative support of the public telecommunications facilities grant program. Amounts are authorized for fiscal years 1982, 1983 and 1984.

47 U.S.C. 606 provides the authority for the telecommunications emergency preparedness functions.

47 U.S.C. 721 provides the authority in the planning and development of a national program for the establishment and operation of a commercial communications satellite system.

2. $13,400,000 of which $700,000 shall remain available until expended.

Additional authorizing legislation to be proposed.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Salaries and expenses

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986..................			199	$13,400
NTIA-7	Adjustments to base and built-in changes:				
	Other increases......................................	...	+$566		
	Other decreases......................................	-3	-550		
	Subtotal, adjustments to base and built-in changes...			-3	+16
	1987 Base..			196	$13,416

Page No.	Comparison by activity:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc. (+) Dec. (-) Over 1987 Base Perm. Pos.	Inc. (+) Dec. (-) Over 1987 Base Amount
NTIA-10	1. Domestic, Federal and international policies:										
	(a) Domestic and Federal policies............	18 (17)	$1,212 (950)	13 (13)	$1,186 (1,260)	13 (13)	$1,213	13 (13)	$1,213	... (...)	...
	(b) International policies............	16 (17)	728 (1,018)	8 (8)	707 (1,110)	8 (8)	732	8 (8)	1,232	... (...)	+$500
	Subtotal..........	34 (34)	1,940 (1,968)	21 (21)	1,893 (2,370)	21 (21)	1,945	21 (21)	2,445	... (...)	+500

Note: Permanent position amounts in parentheses represent workyears. Dollar amounts in parentheses represent obligations.

Page No.		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) Dec. (-) Over 1987 Base	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Comparison by activity:										
NTIA-18	2. Spectrum management:										
	(a) Spectrum plans and policies..........	24 (20)	$ 1,528 (1,683)	24 (23)	$ 1,493 (1,657)	24 (23)	$ 1,547	24 (23)	$ 1,547	...	...
	(b) Spectrum management, analysis and operations..........	115 (118)	6,596 (6,574)	115 (121)	6,624 (6,654)	112 (118)	6,440	112 (118)	6,440	... (...)	...
	Subtotal...........	139 (138)	8,124 (8,257)	139 (144)	8,117 (8,311)	136 (141)	7,987	136 (141)	7,987	... (...)	...
NTIA-25	3. Telecommunication sciences research:										
	(a) Spectrum research and analysis........	24 (30)	1,871 (1,939)	24 (23)	1,838 (1,886)	24 (23)	1,896	24 (23)	1,896	... (...)	...
	(b) Systems and networks research and analysis........	15 (18)	1,576 (1,569)	15 (14)	1,552 (1,606)	15 (14)	1,588	15 (14)	1,588	... (...)	...
	Subtotal...........	39 (48)	3,447 (3,508)	39 (37)	3,390 (3,492)	39 (37)	3,484	39 (37)	3,484	... (...)	...
	Total Requirements..........	212 (220)	$13,511 (13,733)	199 (202)	$13,400 (14,173)	196 (199)	$13,416	196 (199)	$13,916	... (...)	+$500

Note: Permanent position amounts in parentheses represent workyears. Dollar amounts in parentheses represent obligations.

Justification of Adjustments to Base and Built-In Changes
(Dollar amounts in thousands)

	Perm. Pos.	Amount
Other Increases		
Restoration of FY 1986 pay reduction	...	+ 127
Within-grade step increases	...	...
Employee benefits	...	+ 11
Rent payments to GSA (SLUC)	...	+ 333
Federal Telecommunications System	...	+ 6
Postal rate	...	+ 4
Printing and reproduction	...	+ 9
Other Services	...	+ 76
Total	...	+ 566
Restoration of FY 1986 pay reduction	...	+ 127

Restoration of the FY 1986 pay reduction:

Total cost in FY 1986 of the proposed 5 percent pay cut	+ 341
Less 63 percent restoration in FY 1986	- 214
Subtotal, additional amount needed in FY 1987 to restore full year cost	+ 127

	Perm. Pos.	Amount
Within-grade step increases	...	...

An increase of $132,021 is required to cover the cost of within-grade step increases. The computation is as follows:

A. Estimated number of within-grade step increases scheduled	153
B. Step increases not earned due to turnover	13
C. Average step above step 1 per separation	3
D. Average cost per within-grade step increase	$ 1,061
E. Gross cost of scheduled step increase	162,333
F. Less savings due to separations	-41,379
Subtotal personnel compensation	120,954
Personnel benefits at 9.15 percent	+ 11,067
Total cost	$132,021
Amount absorbed	-132,021
Total adjustment	...

	Perm. Pos.	Amount
Employee benefits	...	+ 11
Federal Insurance Contributions Act (FICA) - Effective January 1, 1984 amendments to the Social Security Act increased the tax rates and brought new Federal employees into the Social Security system. The increase of $10,527 provides for new employees covered under the Social Security system.		
Rent payments to GSA	...	+ 333
The Department has determined an estimate for 1987 for currently occupied space. The estimate is based on the 1986 estimated square footage multiplied by the 1987 rates from GSA. This results in an increase of $333,000.		
Federal Telecommunications System	...	+ 6
The 3.7% GNP deflator was applied to the 1986 estimate of $167,000.		
Postal rate	...	+ 4
Effective February 17, 1985 there was an average increase of 9.5% in the Postal rate. Therefore, an increase of $4,000 allows for a 9.5% increase over our FY 1986 anticipated costs of $40,000.		
Printing and reproduction	...	+ 9
The cost of printing (including paper, labor and commercial procurement prices) continues to increase. The DOC Printing Division has estimated an increase of about 6 or 7 percent over FY 1986 costs. This adjustment of $8,580 represents 6.5 percent of the amount in the 1986 estimate of the 1986 Congressional Budget of $132,000.		
Other services	...	+ 76
This covers cost increases in the Departmental Working Capital Fund to maintain their current level of operations.		

	Perm. Pos.	Amount
Other decreases		
FMRS Software Upgrade	...	- 450
A-76 Savings	-3	- 100
Total	-3	- 550
FMRS Software Upgrade	...	- 450

NTIA was given $300,000 increase in the FY 1985 appropriation and $150,000 increase in the FY 1986 request to fund a Frequency Management Records System software upgrade over the course of two years. This is a non-recurring cost and should be subtracted from the base.

	Perm. Pos.	Amount
A-76 Savings	-3	- 100

Estimated savings from productivity reviews proposed for completion during FY 1986.

Justification of Program and Performance

Activity: Domestic, Federal and International Policies

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Domestic and Federal Policies....	18 (17)	$ 1,212 (950)	13 (13)	$1,186 (1,260)	13 (13)	$ 1,213	13 (13)	$ 1,213	... (...)	...
International Policies...........	16 (17)	728 (1,018)	8 (8)	707 (1,110)	8 (8)	732	8 (8)	1,232	... (...)	+ 500
Total Requirements...............	34 (34)	1,940 (1,968)	21 (21)	1,893 (2,370)	21 (21)	1,945	21 (21)	2,445	... (...)	+ 500

Goals and Objectives

Goals:

- Promote diversity of telecommunications facilities (e.g. cable, satellite, earth stations, fiber optics, etc.), services (e.g., cable television, data processing and transmission) and ownership, effective competition and trade, and where feasible advocate deregulation in the domestic and international telecommunications and information (T&I) industries.
- Promote T&I technological development and incentives for diverse information distribution while protecting data security and privacy.
- Assist in the development and identification of emergency preparedness telecommunications requirements for the U.S. Government.
- Ensure the efficient and effective use of telecommunications facilities and resources by the U.S. Government.
- Work to minimize foreign barriers to the successful participation of the U.S. telecommunications industries in international trade.
- Protect and promote through international deliberative bodies, U.S. interests in the planning and management of international T&I facilities and services.

Objectives:

- Formulate and advocate legislative, regulatory, and institutional plans and policies to the President, within the Executive Branch and before the Congress, FCC, and relevant industries and domestic and international organizations to:
  - promote effective competition between and deregulation of existing and emerging information distribution systems (e.g. teletext, cable television, direct broadcast satellites, low-power television, multichannel multipoint distribution systems where feasible;

  - promote the widespread availability of basic telephone services at affordable rates;
  - promote increased minority ownership and operation of telecommunications facilities;
  - encourage the development of diverse T&I services and distribution mechanisms, consistent with overall national telecommunications policy;
  - promote incentives for a vigorous and creative market in information through modernizing improvements in copyright and other laws governing intellectual property;
  - encourage policies that protect data security and individual privacy while promoting efficient use and transfer of information in the private and public sectors; and
  - develop, in conjunction with other Federal agencies, strategies and programs to reduce obstacles which impede the growth and stability of U.S. telecommunications and information industries and trade.
- o Participate with other Federal agencies in communications emergency readiness planning.
- o Develop procedures, and incorporate them into the planning process for a timely and orderly transition from normal to emergency modes of national telecommunications operations. This will ensure information requiring protection is adequately safeguarded.
- o Participate in U.S. facilities planning efforts and mandated oversight of Communications Satellite Corporation (COMSAT) activities, and maintain an effective dialogue with the U.S. T&I industry on international issues.
- o Develop U.S. proposals/positions for, participate in, and implement results of international radio conferences.

Base Program

This activity is concerned with developing policies which will improve domestic and international services provided by the telecommunications industries. It also develops comprehensive policies designed to improve public benefits in both the near term and long range. The Communications Act of 1934 and its amendments provide a base for the regulation of these industries in protecting the public interest. However, existing law, regulation, and administrative procedures are subject to enormous pressures from revolutionary changes in technology and more diverse and intense demand for services. The Administrator of NTIA, as Executive Branch spokesperson, develops and recommends policies to the Congress and the FCC which promote greater diversity of services through the application of technology and effective competition with a minimum of regulation, so that these services can be made available to the public in a timely manner at reasonable cost. Thus, NTIA strives to obtain a proper regulatory balance which will allow for maximum benefit to the public.

NTIA's effort in this activity is organized to treat the unique features and regulatory aspects of various types of telecommunications industries. The first subactivity deals with domestic and Federal policies. Through policy studies, this subactivity develops ways to reduce unnecessary regulation, increase competition and diversity of services in the T&I industries, and increase minority ownership and participation. It also develops policies to foster efficiency and effectiveness in the development and use of telecommunications services by Federal agencies. The second subactivity addresses international policies. Here NTIA develops policy recommendations aimed at improving international T&I services through the introduction of innovative and expanded services. It also participates and advocates our national position before international organizations.

Domestic and Federal Policies

A major focus of NTIA's efforts is on the common carrier industry. While supporting the widespread availability of basic common carrier services, NTIA's role is to advocate policies and proposals that promote the efficient provision of telecommunication services and the reduction of competitive barriers. When the original legislation (Communications Act of 1934) was written, it was difficult to anticipate that technology would advance as rapidly as it has and that these advances would have such significant effects on the competitive environment of the industry. In addition, the fields of communications and data processing have, in many respects, merged and, therefore, such regulatory questions as who should provide what services and under what conditions are made extremely complex and difficult. NTIA's role in this area is accomplished in the following ways: 1) by working with the Congress and the FCC in examining innovative services to ensure that they are provided in a competitive environment; and 2) by ensuring that the Government does not create regulatory barriers which burden the provider or receiver of these services.

In FY 1986, NTIA's efforts are focusing on recent changes in the domestic common carrier industry (e.g. the AT&T divestiture, FCC's Third Computer Inquiry) which are generating controversial and highly significant new questions of telecommunications policy. NTIA is participating as the Executive Branch's agent in legislative consideration of proposals addressing these issues, as well as regulatory proceedings dealing with the introduction of competition, changing technology, and cost allocation and recovery in common carrier services. NTIA will also analyze the evolution of telecommunications technologies, especially those affecting the evolution of telecommunications networks. The focus in FY 1986 is on coordinating internationally mandated standards with growth of an efficient and competitive domestic market.

By FY 1987, NTIA anticipates that many of the significant issues involved in the implementation of the AT&T divestiture will have moved substantially towards resolution, and that competition in the telecommunications industry will have increased substantially. We will continue to be involved, however, in FCC proceedings on the provision of local exchange access and regulatory reform. Additionally, NTIA will undertake research efforts that will form the basis of both FCC filings and legislative proposals. NTIA will also continue to assess the implications of telecommunications networks and standards development and participate in regulatory and policy proceedings implementing new services.

The broadcasting, cable television and related video distribution industries are regulated to varying degrees by the FCC under the Communications Act of 1934. In the past decade, significant changes in technology have raised questions in the Executive Branch, the Congress, and the private sector as to the adequacy of the current structure of these telecommunications industries. NTIA has been directing its efforts toward encouraging deregulation of existing and emerging technologies, greater diversity of services, and greater participation by minorities, by initiating and supporting proposals and by responding to FCC actions and Congressional concerns.

In FY 1986, NTIA is pursuing opportunities for deregulation of the mass media industries, developing and supporting proposals to: (1) eliminate unnecessary or outmoded regulation; and (2) increase competition among and minimize regulation of emerging and existing information and entertainment systems (e.g. teletext, cable television, direct broadcast satellites, low-power television, multichannel multipoint distribution systems). NTIA is also advocating elimination of the cable television industry's compulsory licensing procedures called for by the Copyright Revision Act of 1976.

By FY 1987, some of the efforts to deregulate the mass media industries may have met with success and competition from emerging and existing distribution systems will make the market for information services, entertainment programming, and enhanced interactive services (e.g. alert and alarm systems, and home shopping and banking services) more vigorous. NTIA will continue to provide the FCC and the Congress with analysis and assistance concerning new and emerging issues.

In FY 1986, NTIA is also seeking ways to enhance minority participation in telecommunications. NTIA is: (1) conducting initial engineering assessments to identify potential areas for minority broadcast ownership; (2) providing assistance and disseminating information on ownership opportunities in telecommunications; (3) conducting seminars to help minority telecommunications entrepreneurs compete more effectively in the private sector; (4) developing and commenting on legislative and regulatory proposals which promote minority participation in telecommunications; and (5) working with industry, the Minority Business Development Agency (MBDA) and the FCC on initiatives to increase private sector and minority cooperation in telecommunications. In FY 1987, NTIA will continue to advocate increased minority ownership of and participation in broadcast and other telecommunications facilities.

In FY 1986, NTIA is analyzing current laws and legislative initiatives to protect individual privacy and security of computerized data. NTIA will also assess the functioning of copyright laws covering computer software, data bases and computer chips. In FY 1987, NTIA will continue to address intellectual property issues such as copyright, theft of information and services and computer software issues.

In FY 1986, NTIA's Federal telecommunications policy staff will coordinate issues and tasks focused on institutional mechanisms to resolve communications problems in emergencies, and will monitor the progess of decisions and changes in this area. In addition, NTIA will provide support to the successor of the Emergency Communications Working Group, the National Communications Systems (NSC), by assisting in the identification of issues and deficiencies in the present process of emergency communications planning. NTIA plays a lead role in analyzing the issues identified and developed by the studies and analyses performed by the NCS, and in developing and participating in initiatives to resolve those issues. These include necessary realignments within the Executive Branch to ensure that emergency communications mobilization activities are effective; proposals for legislation and/or Executive Branch policy initiatives in support of realignment recommendations; and development of options for improving the survivability and restorability of the Nation's telecommunications resources, including the development and implementation of a national emergency preparedness telecommunications planning process. NTIA will also participate in efforts to ensure that Federal agency telecommunications activities appropriately accomodate information protection requirements.

In FY 1987, NTIA will play a central role in the development and pursuit of initiatives to revise Federal telecommunications policy and guidance to improve the Government's emergency communications response posture. Also, NTIA will continue the development and coordination of an integrated telecommunications planning process and related procedures, to ensure that routine and emergency communications initiatives are mutually supportive.

International Policies

The Secretary of Commerce is charged by Executive Order 12046 with developing and setting forth plans, policies and programs which relate to international telecommunications issues, conferences, and negotiations. The Secretary of Commerce is also responsible for coordinating economic, technical, operational and related preparations for U.S. participation in international telecommunications conferences and negotiations. To fulfill these requirements, it is increasingly necessary to maintain ongoing exchanges with experts outside of Government. Experts on international telecommunications matters are typically found in the principal U.S. research centers and universities. Consistent with its mission, NTIA will take the policy lead in developing and maintaining consultations with these outside experts.

In FY 1986 and FY 1987, NTIA activities will also include:

- Participating in national and international convocations for the purpose of discussing international telecommunications matters;
- Using these information sources as an input into the development of NTIA's strategic plans; and
- Reviewing and analyzing international telecommunications commercial and regulatory policies for the purpose of developing proposals and counter proposals in support of U.S. goals and objectives.

As the U.S. Signatory to the International Telecommunications Satellite Organization (INTELSAT) and the International Maritime Satellite Organization (INMARSAT), COMSAT takes positions and expresses views at meetings of these organizations, as well as in other fora, which directly affect many U.S. interests. By statute, the President is charged with overseeing COMSAT's participation in INTELSAT. This responsibility, in large measure, has been delegated to NTIA by Executive Order 12046. NTIA will carry out those Departmental responsibilities, which include serving as the chief point of contact between COMSAT and the President. The Department is also charged by statute with overseeing COMSAT's participation in INMARSAT. To carry out NTIA's statutorily-mandated responsibilities, it is necessary to analyze all INTELSAT and INMARSAT documents in advance of action items, present NTIA's views, and work with senior level representatives of the FCC and the Department of State to formulate and present to COMSAT appropriate instructions on particular agenda items which affect U.S. interests. NTIA will continue to monitor COMSAT's implementation of the revised instructional process to ensure that members of the affected industries have access to INTELSAT and INMARSAT documents on a timely basis and have adequate opportunity for input into the instructional process. NTIA will accept written comments from interested parties on INTELSAT and INMARSAT agenda items, and will factor those inputs into the formulation of instructions to COMSAT. NTIA will determine if any deficiencies exist in the instructional process and will develop proposals for making the process more accessible to members of the affected industries, if such action is required. Efforts will also be renewed to achieve full implementation of the Department's statutory authority in the International Maritime Satellite Communications Act of 1978.

The proceedings of the FCC relative to international telecommunications will be revised and analyzed. NTIA will formulate policy recommendations and, where appropriate, file with the Commission and initiate other actions to support and implement Administration policy.

NTIA will participate in FCC sponsored activities on international facilities planning including domestic sessions and international meetings, where appropriate. This will include extensive NTIA participation in working groups involved in the suudy of international traffic, facilities loading, costing and restoration.

NTIA will participate in meetings of U.S. Study Groups and the Joint Working Party to maintain an overview of policy implications of U.S. positions in the ITU's International Consultative Committee of Telephone and Telegraph (CCITT) activities. NTIA will also participate in U.S. National Committee activities for the development of positions on administrative and political issues facing the CCITT. NTIA will provide expert technical and policy guidance as a member of U.S. delegations to certain key international CCITT Study Groups and Working Party meetings.

Meetings will be held with selected groups of international T&I users as well as user organizations to provide for a mutual exchange of information concerning the international arena. These meetings will aid NTIA in assisting U.S. industry in overcoming a variety of problems faced in overseas markets through interdepartmental actions and more effective policy formulation to improve U.S. industry's competitiveness overseas.

Complications related to the introduction of competition continue to emerge in international telecommunications. These problems will be analyzed, implications identified, and recommendations developed depending on relevance to current FCC proceedings, pending legislation and other Government activities.

Intensified efforts by nations to erect or sustain non-tariff trade barriers must be confronted and reversed. For example, the European Community's initiatives to establish European Standards and markets, while redoubling efforts aimed at establishing leadership in high technology telecommunications fields, must be competitively met.

In support of trade and bilateral negotiations, NTIA will continue its consultations with selected regulatory and policy institutions. Area specialists representing these selected countries will analyze the policy implications of increasing trade possibilities for the U.S. which will be based on research focused on the telecommunications markets, regulatory structures, and telecommunications policies of the specific countries. Existing and potential foreign markets for U.S. telecommunications manufacturers will be studied in order to identify sale opportunities and trade barriers for U.S. exports following models of analyses developed on Canada and Japan. In addition, NTIA will analyze the strategic policy links between the development of selected countries' telecommunications infrastructures and financial/technical assistance roles of international organizations.

Recognizing both the need for expanded telecommunications markets for U.S. firms and the growing market potential for those U.S. firms in developing countries, NTIA, in FY 1986 and FY 1987, will continue to seek innovative ways to assist in the expansion of telecommunication infrastructures in developing countries, thereby expanding potential export markets for U.S. suppliers of goods and services. This requires identifying, monitoring and analyzing the activities of regional and international organizations with implications for developing countries' telecommunications development. This activity includes establishing and maintaining relationships through correspondence and meetings with organization officials, collecting and analyzing pertinent materials on development communications as they are generated, establishing a liaison with other U.S. Government agencies responsible for aspects of international telecommunications policy and promoting cooperative efforts with officials from these agencies.

NTIA will also participate in the development and presentation of U.S. policies and positions to be put before the OECD and other international organizations dealing with information issues, such as transborder data flows and international services trade. Activities involved are: representing NTIA/DOC at interagency and international meetings (i.e., Organization of Economic Cooperation and Development (OECD), Intergovernmental Bureau for Informatics (IBI), United Nations Center for Transnational Corporation (UNCTC)); conducting research, preparation of policy recommendations and position papers; and maintaining liaison with U.S. industry groups and the International Chamber of Commerce.

NTIA will provide a focal point for monitoring policy oversight for NTIA's activities in international organizations mandated by Executive Order 12046. The U.S. is a member of the International Telecommunication Union (ITU) which is the United Nations' body for international communications matters. The ITU is involved in all aspects of communications from the management of the frequency spectrum to specifying standards material for all members. NTIA is actively involved in all aspects of the work of the ITU. These activities of the ITU are vital to U.S. interests, both Government and private sector alike.

NTIA will continue its efforts in preparing for the expanded ITU conference schedule by coordinating and developing U.S. proposals and final positions. Also through bilateral and multilateral negotiations, the U.S. will present its views and determine other nations' preliminary positions. These discussions will assist in the development of strategies and tactics to counter the increasing politicization occuring within the ITU. NTIA will be preparing for the following conferences: the High Frequency Broadcasting Conference (HFBC) (1987), Mobile Services WARC (1987), Space WARC (1988), the World Administrative Telegraph and Telephone Conference (1988), Plenary Assembly of the CCITT (1988), the Plenipotentiary Conference (1989), and the annual session of the Administrative Council.

Increase For FY 1987

	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc. (+) or Dec. (-) Perm. Pos.	Inc. (+) or Dec. (-) Amount
International Policies...........................	8 (8)	$ 732	8 (8)	$ 1,232	... (...)	+ $500

An increase in the international area of $500,000 will allow NTIA to sustain and augment the International Policies subactivity. The role of the International Policies subactivity has expanded over the last years resulting from the increasing importance telecommunications plays in the international arena. Since FY 1984, NTIA has been able to utilize carryover funds to sustain these international efforts to the extent possible. However, after FY 1986, all carryover funds will be depleted. This makes it necessary for NTIA to receive an increase in funding in order to maintain these vital activities. The U.S. trade balance with the rest of the world in high-tech areas has raised substantial interest in this Administration. NTIA will increase its efforts in improving market access opportunities for U.S. telecommunication equipment providers. NTIA provides the technical expertise supporting other activities to improve the U.S. trade balance of information goods and services. In this effort, NTIA will also be of use to the International Trade Administration, U.S. Trade Representative, and other Government agencies. NTIA will achieve this objective through the following activities: 1) analysis and research regarding selected countries' regulatory and commercial policies; 2) initiation of expert technical consultations on telecommunication policy matters with the selected countries targeted for market access by the Government; and 3) by providing technical support in trade negotiations. In support of trade and bilateral negotiations, NTIA will expand its consultations and contacts with selected regulatory and policy institutions in several other countries. Existing and potential foreign markets for U.S. telecommunications manufacturers will be studied in order to identify sales opportunities and trade barriers for U.S. exports. In addition, NTIA will analyze the strategic policy links between the development of selected countries' telecommunications infrastructures and the financial/technical assistance roles of international organizations.

These funds will also allow NTIA to participate effectively in the area of international conference preparation. As telecommunications becomes more vital to nations, the number of conferences will increase and the preparations will be more complicated in light of the changing technical and political environment in which these conferences are held. World Administrative Radio Conferences (WARC) are convened by the ITU to address specific telecommunications problems. Also, several other organizations (such as the Organization for Economic Cooperation and Development, European Conference of Postal and Telecommunications Administrations,INTELSAT, INMARSAT, and other regional groups) play a significant role in the development of international telecommunications. These organizations develop telecommunications policies recommendations, and regulations which have an affect on our ability to market telecommunications information and services internationally. Since the T&I industries are both an important growth sector and a supporting factor in the growth of other industries, the U.S. must be adequately prepared for international telecommunication conferences. The 1987 WARC dealing with the Mobile Services will involve a major revision of the existing radio regulations. The 1987 international broadcasting conference will have an impact on the implementation of U.S. foreign policy because of the U.S. use of this service by the U.S. Information Agency (USIA). The 1988 Space conference will affect both the Government and private sector use of the geostationary orbit, while the Telegraph and Telephone conference will be effecting the introduction of new telecommunications services into the 1990's. NTIA will also intensify its participation in activities aimed at the preparation of a constitution for the ITU as well as its activities in the annual meeting of the Administrative Council. Finally, NTIA will participate with the InterAmerican Telecommunications Committee (COM/CITEL) as one area of interaction with developing countries.

Object Class Breakout of Resources Requested

	Amount
Salaries	$325,877
Less Lapse (25%)	-81,469
Total Compensation	244,408
Personnel Benefits	26,396
Travel	14,000
Standard Level User Charge	34,000
Communications, Utilities, and Other Rent	20,000
Printing	1,750
Other Services	151,108
Supplies	1,588
Equipment	6,750
Total	$500,000

Activity: Spectrum Management

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Spectrum Plans and Policies.........	24 (20)	$ 1,528 (1,683)	24 (23)	$ 1,493 (1,657)	24 (23)	$ 1,547	24 (23)	$ 1,547	...	...
Spectrum Management, Analysis and Operations....................	115 (118)	6,596 (6,574)	115 (121)	6,624 (6,654)	112 (118)	6,440	112 (118)	6,440	...	...
Total Requirements............	139 (138)	8,124 (8,257)	139 (144)	8,117 (8,311)	136 (141)	7,987	136 (141)	7,987	...	...

Goals and Objectives

Goals:

The purpose of this activity is to provide policy, management, and direction to ensure the Federal Government will use the radio frequency spectrum effectively and efficiently during both national emergencies and peacetime. The goals of this activity are to:

- Represent the U.S. in the international spectrum management fora.
- Establish policies for and manage the Government's use of the radio frequency spectrum so that this use is effective, efficient, equitable and responsive to national and international requirements.
- Develop, in conjunction with the FCC, plans for effective long-range management and sharing of the radio frequency spectrum resource.

Objectives:

Spectrum Plans and Policies

- Issue/revise allocations and regulations governing Federal spectrum use.
- Develop emergency/wartime and long-range plans for use of the spectrum.
- Coordinate and develop the Government's contribution to the U.S. proposals and positions for international spectrum management fora.
- Participate in bilateral and multilateral meetings on spectrum management issues with foreign administrations.
- Analyze proposals relative to the spectrum management process.
- Develop U.S. proposals/positions for, participate in, and implement results of international radio conferences.
- Improve Government spectrum management and use by improving the skills of spectrum management personnel through training and career development.
- Initiate and conduct scientific and technical cooperation in the field of telecommunications and spectrum management with specific foreign countries in line with U.S. foreign and international trade policy.

Spectrum Management, Analysis and Operations

- Review and process Federal applications for frequency assignments, in order to authorize the use of the spectrum and to maintain data base files and performance measurements necessary for this activity.
- Improve Government spectrum management and use by:
  - Developing plans for intraservice and interservice sharing in selected allocated bands;
  - Evaluating proposed Federal telecommunications systems for certification for spectrum support in accordance with OMB Circular A-11;
  - Resolving conflicting requirements concerning Federal agencies' use of the spectrum;
  - Planning and coordinating spectrum measurements in selected frequency bands which are conducted under the Telecommunication Sciences Research activity to support spectrum resource assessments, compatibility analyses, and compliance with standards and authorized spectrum usage;
  - Providing administrative and technical engineering support in preparation for and participation in international radio conferences.

Base Program

The national objectives for the use of the radio frequency spectrum are to make effective, efficient, and prudent use of the spectrum in the best interest of the Nation, with care to conserve it for uses where other means of communication are not available or feasible. The primary objectives in support of national policies and goals are: (1) to serve the national security and defense, (2) to safeguard life and property, (3) to support crime prevention and law enforcement, (4) to foster conservation of natural resources, (5) to stimulate social and economic progress, (6) to promote scientific research, development and exploration, (7) to enhance the conduct of foreign affairs, and (8) to provide for national and international dissemination of educational, general and public interest information and entertainment. To satisfy these objectives, the radio spectrum is managed by NTIA for the Federal Government and by the FCC for the non-Government sector. A high degree of cooperation and coordination is required between the FCC and NTIA since the majority of allocated radio spectrum is shared between the Government and non-Government sectors. NTIA manages the U.S. Federal Government's use 1/ of the radio frequency spectrum nationally and internationally. In light of technological growth, the advent of satellites, the emergence of developing nations industrially and politically, the need for more rapid communications, and the transfer of large volumes of information, the national and international demands for the finite resource, radio spectrum, has increased and will continue to increase dramatically. It is envisioned that more pressure will be brought to bear on NTIA and the FCC to conserve spectrum, both nationally and internationally. Of paramount concern within the next ten years, will be the World Administrative Radio Conferences at which the nations will implement the agreed-to changes to the international rules and regulations and procedures in regard to the radio spectrum and the management thereof. It is absolutely essential that the United States be prepared in a timely fashion to ensure that its national objectives and requirements are accommodated and fully met at these conferences.

The management of the Federal radio spectrum is contained within this activity. Its responsibilities are to: (1) establish and issue policy through allocations and regulations governing the Federal spectrum use; (2) develop plans for the peacetime and wartime use of the spectrum; (3) prepare for, participate in, and implement the results of international radio conferences; (4) assign frequencies; (5) maintain spectrum use data bases; (6) review Federal agencies' new telecommunication systems requiring spectrum use and certify that spectrum will be available for such use; and (7) provide the technical engineering expertise, perform the necessary spectrum resource assessments and provide the automated computer capability to carry out the above. To perform these responsibilities, the Spectrum Management activity is divided into two subactivities: "Spec-

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1/ Table reflecting typical use of radio frequency bands is on page NTIA-24 trum Plans and Policies (SP&P)" and "Spectrum Management, Analysis and Operations (SMAO)." SP&P stresses the establishment of policies to guide Federal spectrum use; with the FCC, develops long-range plans and policies for utilization of the entire spectrum; and establishes the Federal Government's proposals and counterproposals for international conferences. SMAO emphasis is on authorizing frequency assignments to Federal agencies, preparing technical analysis for national and international issues, reviewing proposed Federal telecommunication systems, and operating the associated computer facilities.

Spectrum Plans and Policies

This subactivity centers on the establishment of plans and policies to help ensure the efficient, effective, and equitable use of the spectrum. It includes three major components. First, with the advice of the Interdepartment Radio Advisory Committee (IRAC), NTIA formulates policies concerning Federal use of the spectrum. Second, in conjunction with the FCC, it formulates long-range plans to accommodate both Government and non-Government requirements. Third, it helps coordinate the preparations of Government and national positions for those international forums that deal specifically with spectrum allocation and regulation.

As part of its role in establishing Federal spectrum management policy, NTIA effects Government allocation and assignment of the radio frequency spectrum. This responsibility includes chairing the IRAC, its major subcommittees and various specialized ad hoc groups. The IRAC, which is a group composed of the representatives of 20 Federal agencies and an FCC liaison person, is the major Executive Branch advisor on Federal agency spectrum management.

With respect to national spectrum concerns, NTIA, in conjunction with the FCC, will formulate long-range spectrum allocation plans that respond to the changing requirements of both Government and non-Government services. Spectrum planning will also be conducted relative to wartime and emergency conditions.

In its international spectrum management role, NTIA cooperates with the FCC and the State Department in preparing for diverse international negotiations and forums on spectrum allocations and spectrum use regulation. Specifically, NTIA coordinates and develops the Federal Government's contributions to the U.S. proposals for these forums and helps prepare the preliminary and final national positions. NTIA also analyzes the known intentions of other nations to determine whether U.S. counter-proposals are necessary. It works towards building confidence worldwide in U.S. spectrum planning techniques so as to win support for U.S. positions and it participates in the negotiations and forums themselves. One result of the World Administrative Radio Conference 1979 (WARC-79) was the requirement for additional international spectrum conferences over and above those anticipated for the next few years.

In FY 1986, NTIA will: (1) direct administrative and technical support for the IRAC, its Spectrum Planning, Technical and Frequency Assignment Subcommittees, and ad hoc groups as the structures for (a) advising NTIA on spectrum policy and procedural matters, and (b) providing recommendations for conflict resolutions; (2) resolve spectrum management problems among the Federal agencies and other domestic and foreign

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entities; (3) prepare for and participate in the ITU (the deliberative body governing multinational telecommunication public policy) Administrative Council (41st Session), Medium Frequency (MF) (1605-1705 kHz) Region 2 Administrative Radio Conference, CCIR Study Group Meetings and CCIR Plenary; (4) continue implementation and evaluation of the results of the Administrative Council (40th Session), HF WARC (1st Session) and the Space WARC; (5) prepare for the 1986 Region 2 Administrative Radio Conference for the Broadcasting Service in the 1605-1705 kHz band, the Administrative Council (42nd Session), the 1987 HF WARC (2nd Session), the 1987 Mobile WARC, and the 1988 Space WARC (2nd Session); (6) negotiate with personnel in foreign administrations in support of U.S. aims and goals at international conferences; (7) develop and modify spectrum policies and procedures for crisis-related situations; (8) conduct long-range spectrum planning in coordination with the FCC; (9) prepare for and participate in the ITU International Radio Consultative Committee (CCIR) Study Groups' activities; (10) provide emergency readiness planning for the Federal use of the radio frequency spectrum; (11) chair and direct the activities of the Frequency Management Advisory Council; (12) continue spectrum management training activities including support for the U. S. Telecommunications Training Institute (USTTI); and (13) formulate policies, issue and revise allocations and regulations concerning Federal spectrum use.

In FY 1987, NTIA will: (1) direct administrative and technical support for the IRAC, its Spectrum Planning, Technical and Frequency Assignment Subcommittees, and ad hoc groups as the structures for (a) advising NTIA on spectrum policy and procedural matters, and (b) providing recommendations for conflict resolutions; (2) resolve spectrum management problems among the Federal agencies and other domestic and foreign entities; (3) prepare for and participate in the ITU Administrative Council (42nd Session), 1986 Region 2 Administrative Radio Conference (ARC) for Broadcast Services (1605-1705), the 1987 Mobile WARC and the 1987 HF WARC (2nd Session); (4) finalize implementation and resolution of planning associated with the 1986 Administrative Council, Region 2 MF Administrative Radio Conference, CCIR Study Groups and CCIR Plenary; (5) prepare for the 1988 Space WARC (2nd Session) and other future international conferences and CCIR activities; (6) negotiate with personnel in foreign administrations in support of U.S. aims and goals at international conferences; (7) develop and modify spectrum policies and procedures for crisis-related situations; (8) conduct long-range spectrum planning in coordination with the FCC; (9) prepare for and participate in the ITU CCIR Study Groups' activities; (10) provide emergency readiness planning for the Federal use of the radio frequency spectrum; (11) chair and direct the activites of the Frequency Management Advisory Council; (12) continue spectrum management training activities including support for the USTTI; and (13) formulate policies, issue and revise allocations and regulations concerning Federal spectrum use.

Spectrum Management, Analysis and Operations

This subactivity has three components. One is spectrum management which includes frequency assignment and utilization, the maintenance of data files necessary for the assignment process to be carried out efficiently, the activity required to ensure Federal radio station compliance with spectrum use regulations, and administrative support to the IRAC and committees. Another is spectrum analysis which includes the study of how efficiently and effectively Federal systems currently use the radio spectrum, the review of proposed major Federal systems using the radio frequency spectrum, the resolution of operational problems involving Federal agencies, and technical engineering support for NTIA's international spectrum forums. The third element is spectrum operations which includes maintenance of computer facilities, production of computer-generated reports necessary for spectrum management and analysis, and the development, maintenance and enhancement of software and analytical models to support the spectrum management and analysis activities.

In its spectrum management effort, NTIA reviews, processes, and authorizes Federal Government radio frequency assignments. Each year the agency receives an increasing number of requests for such assignments. NTIA will process approximately 86,000 weighted frequency assignment actions.2/ It will also make on-site inspections of facilities to determine the degree of compliance with authorized use and will continue its reviews of Federal frequency assignments to evaluate the validity of current needs. This frequency assignment responsibility involves chairing the IRAC Frequency Assignment Subcommittee as well as directing that Subcommittee's activities and providing its administrative support. The assignment responsibility also involves ensuring that the spectrum needs of the United Nations and foreign embassies are met. NTIA maintains and updates files and records necessary for radio spectrum management. Some of these are in hard-copy form. Many of them, however, are computerized. The computerized files include: the Government Master File of Frequency Assignments; portions of the FCC frequency records necessary for use in Federal spectrum management, especially the management of shared Government/non-Government frequency bands; frequency allocation records; terrain elevation data; and Federal systems review data. NTIA uses these diverse files and records to provide varied information and publications to its own staff and to the rest of the spectrum management community. Some of these data relate to border frequency coordination with Canada and Mexico. NTIA also provides a monthly microfiche publication of the total Government Master File of Frequency Assignments and a Directory of Field Contacts. In addition, 6,700 requests for specialized retrieval from these varied files are expected in support of the activities in spectrum management. The information so provided will be used by Federal agencies in proposing frequency assignments and by NTIA personnel in analyzing potential interference problems. Also within the spectrum management activity, the NTIA Manual of Rules and Regulations governing the Federal Spectrum will be updated and administrative support will be provided to the IRAC, the Spectrum Planning Subcommittee, the Technical Subcommittee and the IRAC ad hoc groups.

In its spectrum analysis effort NTIA: conducts Spectrum Resource Assessments (SRAs) System Reviews, and Space System Reviews; assists Federal agencies in resolving operational problems; and, provides technical engineering/policy analysis support for international conferences. NTIA will conduct seven SRA studies to evaluate the effect of existing and planned Government telecommunication systems on the radio frequency spectrum. Approximately 11 percent of the spectrum used by the Federal Government will be studied. These technical/policy analyses will be of two types: the first focusing on selected portions of the radio frequency spectrum; and, the second focusing on particular types of uses of the spectrum. Both types of studies will examine present and planned equipment usage to determine if the spectrum is efficiently and effectively used, the potential for compatible sharing Federal services, and the effects of proposed and planned national and international allocation changes on the ability of Federal agencies to complete their mandated missions. NTIA will also investigate the possibility of increased sharing of spectrum resources between Federal and nonfederal telecommunication system operators in order to increase the efficient use of the spectrum within the U.S. NTIA will continue to use the results of the ITS Radio Spectrum Measurement System and the necessary supporting laboratory measurement equipment. These measurement results will help in the evaluation of frequency utilization and compliance with regulations in order to help agencies improve management of the spectrum resources under their control, and will provide measurement data to support SRAs. To accomplish these tasks, NTIA will evaluate data regarding on-the-air use of frequencies by Federal radio stations, and analyze information collected previously in order to assess the extent and nature of the agencies' use of assignments. NTIA will continue its System Reviews of proposed Federal telecommunications systems for compliance with Federal regulations and for compatibility with other present and planned systems, and its Space System Reviews of proposed Federal space systems for coordination requirements with foreign countries, and proposed foreign space systems for assessment of compatibility with Federal telecommunication systems. After completion of a preliminary System Review, the NTIA, with the advice of an interagency committee, either provides or denies certification of spectrum support for the system or indicates what changes are required in the system before certification can be provided. NTIA System Reviews are done at the conceptual, experimental, developmental and preproduction stages of a given system's procurement cycle, and certification of spectrum support is required by OMB Circular A-11 before an agency can request funding for the next stage. NTIA will perform approximately 102 reviews.

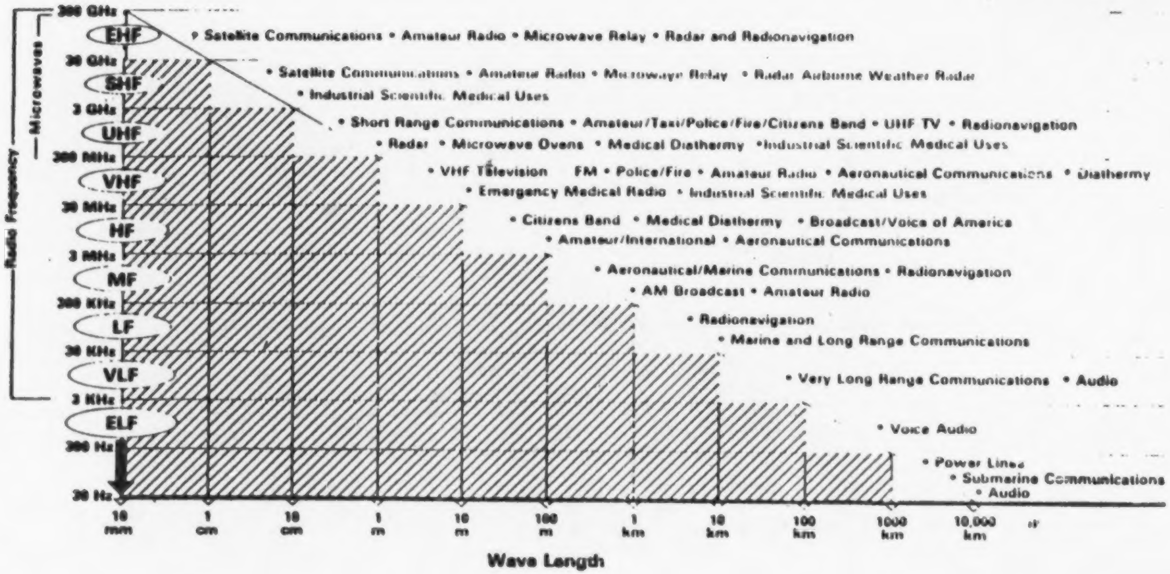
2/Weighting factors were developed in order to permit a better estimate of the actual workload rather than a raw count of the number of actions received. They were based on the average time needed to process various categories of actions. The present weighting factor system consists of ten categories of workload in the frequency assignment area: (1) Frequency Assignment Subcommittee (FAS) member new actions; (2) modification actions; (3) deletion actions; (4) processed Canadian/Mexican actions; (5) procedural actions; (6) actions received from non-FAS; (7) FAS tabled actions; (8) changes to Government Master File actions; (9) actions sent to Canada/Mexico; and (10) development of technical criteria for automating frequency assignment processes.

NTIA will perform an in-depth analysis of the system's electromagnetic compatibility on one of the proposed systems. NTIA will assist in resolving operational conflicts that arise between Federal agencies regarding the use of the spectrum and coordinating the process of meeting Federal agency spectrum requirements that cannot be satisfied within the provisions of existing policies and procedures. These operational problems are detected through band studies or brought to the attention of NTIA by other Federal agencies. Solving such problems demands analyses of the effects that proposed changes in frequency assignments, operational procedures, or equipment will have on the electromagnetic environment as well as consideration of the various trade-offs that exists between technical and operational factors. NTIA will provide solutions to two operational problems involving incompatibility between Federal agency operations. In support of international spectrum management, NTIA will continue to provide engineering analyses on the technical issues to support U.S. participation in and preparation for the international conferences and meetings.

In its spectrum operations effort, NTIA will maintain its computer facilities and associated software to house and use the data base files stated in the spectrum management area above. Support to spectrum management also includes the update and development of new software to enhance the timeliness and efficiency of the frequency assignment process. To conduct the various reviews and analyses, NTIA continuously assesses its analytical capability to ensure that this capability contains methods of problem solving appropriate to new communication systems and to state-of-the-art changes in telecommunications technology. It develops and maintains analytical computer programs that will permit rapid computation of interference effects between existing and proposed systems. A number of these computer programs must be tailored to fit requirements of specific problems.

In FY 1986 and FY 1987, NTIA will: (1) process and authorize approximately 86,000 weighted frequency assignment actions to ensure interference-free operations of Federal stations; (2) maintain and update spectrum management bases, and issue changes to regulations/allocations; (3) assess the present and projected Federal use of the spectrum by conducting seven SRA's, representing approximately 11 percent of total Federal bands to be investigated (concentration will be on bands and services supporting upcoming international conferences, as well as other bands where significant improvements in utilization appear possible); (4) resolve two operational problems concerning interagency conflicts in the use of the radio frequency spectrum that cannot be satisfied within the provisions of existing policies and procedures by evaluating trade-offs between technical and operational factors; (5) evaluate approximately 102 proposed Federal systems to determine compatibility with present and other proposed systems, adherence to regulations and availability analysis (the results of which will be approval with changes in frequency band, operational procedures or system design, or disapproval); (6) provide technical support to the IRAC, and subcommittees thereof, associated with preparation for and participation in international conferences and CCIR study groups; (7) maintain and update existing computer software used for processing assignments, data bases, and interference calculations; (8) design or implement new software packages to further improve assignment data processing and analytical engineering evaluation; and (9) complete the UNIVAC computer system software conversion.

Typical Uses of Radiofrequency Bands



EHF • Satellite Communications • Amateur Radio • Microwave Relay • Radar and Radionavigation

SHF • Satellite Communications • Amateur Radio • Microwave Relay • Radar Airborne Weather Radar • Industrial Scientific Medical Uses

UHF • Short Range Communications • Amateur/Taxi/Police/Fire/Citizens Band • UHF TV • Radionavigation • Radar • Microwave Ovens • Medical Diathermy • Industrial Scientific Medical Uses

VHF • VHF Television FM • Police/Fire • Amateur Radio • Aeronautical Communications • Diathermy • Emergency Medical Radio • Industrial Scientific Medical Uses

HF • Citizens Band • Medical Diathermy • Broadcast/Voice of America • Amateur/International • Aeronautical Communications

MF • Aeronautical/Marine Communications • Radionavigation • AM Broadcast • Amateur Radio

LF • Radionavigation • Marine and Long Range Communications

VLF • Very Long Range Communications • Audio

ELF • Voice Audio • Power Lines • Submarine Communications • Audio

Activity: Telecommunication Sciences Research

(Dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Spectrum Research and Analysis...	24 (30)	$1,871 (1,939)	24 (23)	$1,838 (1,886)	24 (23)	$1,896	24 (23)	$1,896	... (...)	...
Systems and Networks Research and Analysis..................	15 (18)	1,576 (1,569)	15 (14)	1,552 (1,606)	15 (14)	1,588	15 (14)	1,588	... (...)	...
Total Requirements..............	39 (48)	3,447 (3,508)	39 (37)	3,390 (3,492)	39 (37)	3,484	39 (37)	3,484	... (...)	...

Goals and Objectives

Goals:

- o Ensure efficient, effective, and equitable use of the radio spectrum resource.
- o Increase spectrum usefulness by developing ways of using presently congested portions more efficiently and by opening up new portions for productive use.
- o Develop and promote policies to encourage diversity of services, effective competition, and minimal Federal regulation of domestic and international T&I industries.
- o Develop and promote policies to minimize Federal and foreign Government involvement in international telecommunications and information markets, and to maintain the economic competitiveness and technical leadership of U.S. T&I industries.

Objectives:

- o Develop analytical techniques to assist in the Federal Government frequency assignment process.
- o Provide Government and industry telecommunication users and planners with analysis methodology, engineering models, design techniques, and data concerning radio spectrum and propagation characteristics.
- o Provide technical support for U.S. participation in international spectrum allocation organizations and conferences.
- o Develop user-oriented Federal telecommunication standards that facilitate private sector response to Federal telecommunication requirements.
- o Participate in and contribute to international negotiations concerning T&I technical standards.

Base Program

In this activity, NTIA applies its technical research and engineering capabilities at the Institute for Telecommunication Sciences in Boulder, Colorado to improve the United States' telecommunications technology base through major technical efforts directed at finding more effective and efficient ways to utilize our national spectrum resource and improving the planning, use, and evaluation of Government telecommunications systems. Concomitant with these efforts, the Institute provides a core telecommunications research capability that can be accessed by all sectors of our society. Most importantly, Institute research provides the technical foundation for Administration telecommunications policy development in national and international arenas.

This NTIA activity encompasses two program subactivities. The first is Spectrum Research and Analysis, which is directed toward improving our understanding of radio-wave transmission to enhance spectrum utilization and the performance of radio communication systems. Important outputs of this research are spectrum use concepts and models that lead to more efficient public and private use of radio frequency spectrum, and electromagnetic wave and propagation models that lead to improvement in radio system performance.

The second subactivity is Systems and Networks Research and Analysis, which is directed toward developing domestic and international telecommunication standards, assessing the performance of Government and public telecommunication networks, and evaluating new technologies for application to future needs. These activities facilitate competition in the U.S. telecommunications industry, promote international trade opportunities for U.S. telecommunication firms, and improve the cost effectiveness of Government telecommunications use.

In both subactivities, NTIA contributes substantially to work of the ITU, and especially its major subdivisions, the International Radio and International Telephone and Telegraph Consultative Committees (CCIR and CCITT) and the International Frequency Registration Board (IFRB).

Spectrum Research and Analysis

This subactivity consists of two principal components: (1) efforts to improve spectrum management and utilization techniques through various technical engineering analyses and studies; and (2) efforts to develop and apply new technology to improve the efficiency of spectrum use through applied research and analysis.

In FY 1986, NTIA is enhancing spectrum management and utilization techniques by conducting measurements utilizing the upgraded Radio Spectrum Measurement System (RSMS) to ensure compliance with frequency assignment rules and regulations. These measurements are being accomplished in the land mobile and radar bands at selected sites and are being undertaken in conjunction with the ongoing maintenance and refinements of the new programs and equipment installed in the RSMS. NTIA is initiating one or more Spectrum Resource Assessments (SRA) to further support essential spectrum utilization analyses ongoing at NTIA. Technical support is also continuing on specific issues addressing frequency management concerns and continued work is being accomplished within the Technical SubCommittee (TSC) of the IRAC to define spectrum efficiency and develop criteria for measuring these efficiencies. NTIA is assessing the technical impacts of decisions made at the 1984 High Frequency Broadcasting Conference (HFBC) and participating in the Intersessional Working Group sessions. Refinements and modifications of the computerized model for HF broadcast planning are underway in support of preparations for the Second Session of the HFBC. Finally, NTIA is planning an assessment of AM broadcasting station operations to determine the potential for extending daytime-only service.

In FY 1987, the resources available for spectrum monitoring using the RSMS will be directed toward measuring spectrum usage occupancy and summarizing the results in support of specific IRAC concerns. In addition, a number of further enhancements will be undertaken to develop improved software to support increasingly sophisticated monitoring activities. Current and future Federal use of the spectrum will also be addressed by performing at least one Spectrum Resource Assessment in those bands where significant improvements in utilization appear possible. Technical support will be continued on major frequency management concerns through representation at technical subcommittee (IRAC) meetings, with principal emphasis being placed on improving Federal spectrum use and reallocation of portions of that spectrum to the private sector. NTIA will also finalize the U.S. positions for the HFBC to be held January-March 1987, and during the early part of the fiscal year, NTIA will analyze the stated positions of various Administrations and determine their impact on the U.S. HF broadcasting requirements. During the conference, NTIA will support the U.S. delegation by providing direct access to the planning program from the conference site (Geneva) and will perform analyses of the proposals submitted by Administrations during the conference. Follow-on efforts will involve examining the specific decisions adopted during the Second Session of the conference and assessing their impact on U.S. HF broadcasting objectives.

With respect to technology for efficient use of the spectrum, NTIA in FY 1986 is continuing the millimeter wave demonstration range to test the performance of telecommunication systems under varying real-world environments and also to make direct comparisons of systems' performance and service reliability under various climatological conditions. Such demonstrations give potential millimeter wave users a measure of the similarities and differences that would be experienced at a higher frequency vs. the frequency they are currently using. Thus far, NTIA's efforts have focused on the frequencies between 10 to 100 GHz and comparing the application of millimeter wave use with currently available microwave systems. Work is also being expanded in the area of improved modeling of VHF/UHF transmissions. Relying on previous modeling of those factors of VHF/UHF propagation that are most likely to give rise to interference to telecommunication systems, work is proceeding to verify and validate these models using data derived under real-world operating conditions. The VHF/UHF propagation and methodologies are being extended to prediction of the performance of wide bandwidth telecommunication systems and digital telecommunication systems operating under varying environmental constraints.

In FY 1987, NTIA will extend its millimeter wave research to include the 100-200 GHz range and apply that knowledge to determine the potential applications for millimeter use in satellite systems. Additionally, NTIA will continue to strive to improve its understanding of transmissions in the VHF/UHF bands. In past years, NTIA has developed and verified models to be used by Federal frequency managers and planners in the decision-making processes for the use of VHF and UHF spectrum. In FY 1987, NTIA will assess the adequacy of its existing computer models and incorporate further refinements into those programs to make them more useful for specific frequency management requirements and policy-making decisions.

Systems and Networks Research and Analysis

This subactivity has four primary objectives. First, NTIA is contributing to the development of international telecommunications standards to strengthen U.S. participation in international telecommunication markets. Second, NTIA is continuing its active role in developing and advocating U.S. industry and Government standards for telecommunication performance specification and measurement, both to promote fair competition and innovation in the U.S. telecommunications industry and to enhance the cost effectiveness and performance efficiencies of telecommunications equipment and services used by the Government. Third, NTIA is conducting technical analyses of orbital spacings, frequency assignments, and related research associated with the proposals and guidance set forth in the 1979 General World Administrative Radio Conference and drawn from advanced satellite technologies. Last, NTIA is performing studies and analyses aimed at integrating the rapid advances in telecommunication technology with NTIA information policy proposals.

In the first subactivity component dealing with international standards development, NTIA, in FY 1986, continues to provide technical leadership and support of U.S. participation in standards development, including specifications for the rapidly developing Integrated Services Digital Network (ISDN). NTIA is leading and supporting U.S. participation in four ITU-based international standards committees under the auspices of the U.S. State Department (CCITT Study Groups VII, XI, XVII, and XVIII); developing and presenting draft CCITT recommendations on data communication performance measurement; developing and presenting U.S. contributions to ISO TC97 SC16 on Quality of Service and the Open Systems Interconnection (OSI) reference model in cooperation with the American National Standards Institute (ANSI); and conducting essential industry/Government liaison to assure fair representation and relevant feedback to all U.S. participants on international standards issues. NTIA continues to serve as a technical resource for supplying and interpreting international standards and recommendations.

NTIA is also broadening and strengthening U.S. industry participation in international standards development through continued outreach efforts in three areas: seminars, workshops, and industry technical conferences; NTIA and other publications; and standards information services. NTIA is developing a computer based CCITT standards information service which will provide summaries of CCITT documents and standards related information to industry and Government users.

In FY 1987, NTIA will provide U.S. committee and U.S. delegation leadership for relevant CCITT Study Groups and will participate in related work of ISO SubCommittee activities, leading to the development of functional user-oriented telecommunication standards for various domestic and international services, e.g., message handling, integrated service digital networks, etc. NTIA will also support extended CCITT Study Group participation in response to U.S. industry and Government needs. Examples include: Study Group II on telephone operation and quality of service, Study Group VIII on terminal equipment for telematic services. FY 1987 will be extremely important to NTIA's international standards effort because all recommendations planned for approval at the 1988 CCITT Plenary Assembly must be completed during that period. NTIA will broaden and strengthen U.S. industry participation in international standards development through continued outreach efforts. NTIA will continue to develop its automated computer-based CCITT standards information service providing summaries of CCITT documents and information to industry and Government users.

NTIA will also continue its active involvement in the technical standards development process for the ISDN. ISDN is the currently evolving multinational digital communication network which will ultimately provide integrated voice, data, facsimile, and video services to subscribers on a worldwide basis. Building upon the FY 1986 effort, NTIA will continue, in FY 1987, to address some of the most compelling issues facing this network evolution, including the myriad of technical aspects of service quality and quantity, the provision of alternative network transmission configurations (cable, microwave, fiber) and modes (analog, digital). This work establishes the foundation and philosophy for the future U.S. technical alternatives available within the ISDN framework.

In the data communications area, NTIA is developing tools and techniques to assist users in applying Federal standards in defining and fulfilling their data communication requirements. In FY 1986, the data communications effort is focusing on standards technology transfer--making the performance specification and measurement tools developed by NTIA directly available to assist providers, communication managers, and users in the planning, procurement, and operation of data communication services. These tools will promote fair competition in the telecommunications equipment and service industry, encourage technology innovation, improve providers' ability to assess proposed technology enhancements from the perspective of the user, and improve Federal economies in the procurement and use of data communications.

In FY 1987, the data communications effort will focus on promoting competition and technology innovation in the U.S. telecommunications equipment and services industries by making those standards developed by NTIA directly available to assist providers, communication managers, and users in the planning, procurement, and operation of data communication services. Specifically, NTIA will lead/support ANSI T1 (Telecommunications)

Working Group efforts to develop engineering-oriented data communication performance standards compatible with the user-oriented standards already developed by NTIA. NTIA will apply the user-oriented standards in comparing the performance of alternative data communication services and protocols in typical Federal applications and demonstrate the use of the NTIA-developed standards in assessing exchange network access quality from a data communications perspective. NTIA will provide key performance measurement technology to U.S. common carriers, test equipment manufacturers, and users to facilitate economical network testing. Lastly, NTIA will prepare technical reports and open literature publications documenting results of the committee standardization and NTIA measurement efforts. These efforts should facilitate efficient matching of available equipment and service offerings with user communications needs, potentially providing substantial cost savings to industry and Government users.

NTIA, in FY 1986, is actively pursuing technical participation in preparatory efforts for the final session of the 1985-1988 Space WARC through final development and use of various planning models, e.g., GSOAP, Minimum Ellipse, and Footprints models. In addition, NTIA will participate in the U.S. technical working committee (Ad Hoc 178) which works toward improvements in the U.S. utilization of space resources.

NTIA will also develop experimental plans for the upcoming NASA Advanced Communications Technology Satellite (ACTS), which is scheduled to be launched in 1989 as a laboratory satellite for state-of-the-art space communications experimentation. The ACTS communications technology payload will incorporate the high-risk technologies necessary to permit more efficient use of orbit and spectrum resources and allow for new forms of communications data transfer. Since NASA is making available the capabilities of the ACTS spacecraft for experimentation, NTIA will be able to continue detailed planning for cost-effective measurement activities in support of state-of-the-art work in satellite communications performance.

FY 1987 will be a critical year in NTIA's technical support to U.S. negotiators preparing for the Second Session of the 1985/1988 Space WARC. The computer-based models developed by NTIA will be applied in evaluating alternative proposals for spectrum/orbit resource sharing among ITU member countries. Computer simulation results will be used to shape U.S. negotiating positions and to assess the positions of other participants with respect to interference potential and resource utilization efficiency. The models will be prepared for use on ITU-provided computers (or U.S. based computers accessible via telecommunications) to permit on-line analysis of negotiation proposals by members of the U.S. delegation. NTIA will also participate with NASA in organizing and planning comprehensive ACTS experiments designed to enhance the spectrum/orbit efficiency of future communication satellites. The NTIA-developed computer models will be used to demonstrate the resource enhancement potential of these new technologies to address spectrum and orbit shortage concerns being expressed by other participants in the Space WARC.

Finally, NTIA will continue to pursue technical analyses, in FY 1986 and 1987, of emerging information industries through the identification of domestic and foreign policies that may constrain trade opportunities in this area. Emphasis will be on international copyright issues, particularly concerning computer software and other intellectual property rights.

Summary of Requirements by Object Class
(Dollar Amounts in Thousands)

Appropriation: Salaries and Expenses

Object Class		1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			
		Pos.	Work Years	Amount	Pos.	Work Years	Amount	Pos.	Work Years	Amount	Emp. 12/31
11.	Personnel compensation:										
11.1	Permanent positions............	196	185	$7,661	196	185	$7,905	...	...	+$244	196
11.3	Positions other than permanent..	20	14	367	20	14	367	...	...	...	37
11.5	Other personnel compensation....			58			58			...	...
	Total.........................	216	199	8,086	216	199	8,330	...	...	+244	233
	Other Objects:										
12	Personnel benefits..............			945			971			+26	
21	Travel and transportation of persons....................			365			379			+14	
22	Transportation of things........			7			7			...	
23	Rent, communications and utilities:										
23.1	Standard level user charges.....			961			995			+34	
23.2	Other rent, communications and utilities.....................			984			1,004			+20	
24	Printing and reproduction.......			176			178			+2	
25	Other Services..................			1,468			1,619			+151	
26	Supplies and materials..........			199			201			+2	
31	Equipment.......................			225			232			+7	
	Total requirements.............			$13,416			$13,916			+500	

Justification by Object Class
(Dollar Amounts in Thousands)

Object Class	1987 Base Pos.	1987 Base Work Years	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Work Years	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Work Years	Inc. (+) or Dec. (-) Amount	Emp. 12/31
11.1 Full-time Permanent positions										
Executive Level..............	1	1	$ 73	1	1	$ 73	...	...	...	...
Senior Executive Service.....	15	15	685	15	15	685	...	...	...	13
General Schedule.............	180	169	6,903	180	169	7,147	...	...	+$244	183
Total, full-time permanent positions..................	196	185	7,661	196	185	7,905	...	...	+244	196
11.3 Positions other than full-time permanent										
General Schedule..............	20	14	367	20	14	367	...	...	...	
11.5 Other personnel compensation										
Awards........................			24			24			...	
Overtime......................			34			34			...	
Total, other personnel compensation..................			58			58			...	
12.1 Personnel benefits										
Civil service retirement......			509			523			+14	
Federal Insurance Contribution Act, FICA...................			184			189			+5	
Health Insurance..............			214			220			+6	
Life Insurance................			36			37			+1	
Employees' Compensation Fund..			2			2			...	
Total, personnel benefits.....			945			971			+26	
21.0 Travel and transportation of persons										
Per diem......................			170			176			+6	
Common carrier................			189			197			+8	
Other.........................			6			6			...	
Total, travel and transportation of persons.............			365			379			+14	

Justification by Object Class (cont)
(Dollar Amounts in Thousands)

	1987 Revised Base			1987 Estimate			Inc. (+) or Dec. (-)		
Object Class	Pos.	Work Years	Amount	Pos.	Work Years	Amount	Pos.	Work Years	Amount
22.0 Transportation of things......			$ 7			$ 7			...
23.1 Standard level user charges......................			961			995			+$34
23.2 Communications, utilities and other rent									
Federal Telecommunications System..................			$ 173			$ 177			+4
Other telephone, telegraph and teletype service....			50			51			+1
Postal service by USPS....			44			45			+1
Rental of automatic data processing equipment....			554			565			+11
Rental of office copying equipment...............			65			66			+1
Other equipment rental....			98			100			+2
Total, communications, utilities and other rent..........			984			1,004			+20
24.0 Printing and reproduction									
Working Capital Fund printing................			161			163			+2
Boulder printing..........			15			15			...
Total, printing and reproduction...........			176			178			+2

Mr. SMITH. Go ahead.

Mr. JOYCE. Thank you, Mr. Chairman. I have a statement.

Mr. SMITH. Highlight it.

BUDGET HIGHLIGHTS

Mr. JOYCE. I think rather than reading it I will just summarize it, if that is all right. Our budget has two basic parts. The first part is for salaries and other expenses to operate the agency, and the second part is for a grant program that we administer to help subsidize the cost of building public telecommunications facilities.

I thought I would make three points this morning: First, I will tell you very briefly what we have done to comply with the Gramm-Rudman-Hollings legislation. What we have done there is trimmed both of these two programs by the required amount, which totals about $1.6 million and we have been able to do that without a negative impact on any of our programs, without any RIFs or reductions in our employee force, and we have made the cuts across the board line item by line item, throughout the budget.

The point is, I would like to ask this committee's support for the Administration's request to rescind all funding for the grant program for 1986. The appropriation amount is $21.6 million, and we are seeking rescission of that funding for 1986.

If I could, I will cite two primary reasons as to why we believe that funding for this program ought to be terminated. First, the program has accomplished its original objective. The original objective was to establish the infrastructure, the public telecommunications infrastructure in this country, and today 97 percent of all Americans have available to them public broadcasting. Therefore the original purpose of the program has been accomplished.

Mr. SMITH. What percent did you say?

Mr. JOYCE. Ninety-seven percent. Ninety-five percent of all Americans have public television service available to them. Eighty percent of all Americans have public radio service available to them, and when you overlay the two together, it means that 97 percent of all Americans have some public broadcasting service available to them, and in large part the 3 to 5 percent who don't live in such isolated areas of the country that it is not technically or economically feasible to put additional facilities in place.

The second point is that public broadcasters today have more financial resources available to them than ever before, and the financial resources that have come into public broadcasting stations have been on the increase every year since the creation of the program. Just to give you some information, in 1981, a total of $769 million was available for public broadcasting organizations; the following year, $845 million; in 1983, $899 million and in 1984 $974 million; and it appears that the 1985 budgets in the aggregate for public broadcasting will be considerably in excess of $1 billion.

The third point that I would like to make is to seek this committee's support for the President's request for the 1987 budget for NTIA, which totals, $13.9 million for the salaries and expenses account. This is an increase of approximately 3.8 percent above this year's 1986 appropriation for salaries and expenses, and we believe it is what is required to maintain our programs at their existing levels. As I said on the second point, we are seeking a rescission of the 1986 grant funds, and obviously we are not seeking money for that program in the 1987 budget.

That concludes my remarks. I will be pleased to answer questions.

[The statement of Mr. Joyce follows:]

STATEMENT BY THE ACTING ASSISTANT SECRETARY
FOR COMMUNICATIONS AND INFORMATION
RODNEY L. JOYCE
BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE ON THE DEPARTMENT OF COMMERCE, JUSTICE, AND STATE, THE JUDICIARY, AND RELATED AGENCIES

Mr. Chairman and Members of the Committee:

Thank you for this opportunity to discuss our proposal to rescind funds for 1986 and the 1987 budget request of the National Telecommunications and Information Administration (NTIA).

1986 BUDGET

NTIA receives apppropriations to cover, first, its salaries and expenses and, second, to administer the Public Telecommunications Facilities Program or PTFP. In keeping with the Balanced Budget and Deficit Reduction Act of 1985, and the President's overall program to reduce Federal expenditures, we are asking your support today for measures which would reduce the 1986 appropriations currently available to NTIA for both salaries and expenses and for PTFP by a total of $23.4 million.

The Balanced Budget and Deficit Reduction Act of 1985, commonly referred to as the Gramm-Rudman-Hollings Act, requires NTIA to reduce FY 1986 appropriations by $1.6 million. This will reduce the Salaries and Expenses account by $576,000, PTFP grant administration funds by $52,000, and actual grant funds by $980,000.

Importantly, these reductions will be made across-the-board, by line item, and will not result in reductions-in-force, premature termination of existing work, or programmatic cutbacks. The remaining reduction which we are proposing will be achieved through the rescission in 1986 of $21.8 million from the PTFP grant program. The PTFP was established in 1963 at a time when there was very little public broadcasting. Since then, over $281 million in grants has been awarded, and access to public broadcasting has been greatly extended. At present, over 95 percent of the population receives either public radio or public television. The program's fundamental goal of extending public broadcasting to a majority of the United States has thus been accomplished. During a period that requires great restraint on Federal spending, we are opposed to continuing Federal grants for new stations, planning, or the replacement of equipment. Therefore, the President's 1987 budget request recommends that the facilities program be terminated.

1987 BUDGET REQUEST

For 1987, an appropriation of $13,916,000 is requested for NTIA's salaries and expenses. This represents an increase of $516,000 over the 1986 appropriation of $13,400,000. This small increase is necessary to maintain our important international activities at their current level.

NTIA's GOALS

NTIA, through the Secretary of Commerce, is the principal policy adviser to the President on domestic and international telecommunications issues. NTIA's broad goals include: (1) developing and advocating policies to decrease regulation and increase competition in both the domestic and international marketplaces; (2) providing policy and managing the efficient use of the electromagnetic spectrum; and (3) maintaining the U.S. leadership position in telecommunications technology. Efforts in these areas contribute to the leading role the United States must continue to take in adapting to the rapid changes in the telecommunications arena.

NTIA'S DOMESTIC ACTIVITIES

Domestically, NTIA's role includes developing and advocating policies aimed at promoting the diversity of services, effective competition, and deregulation to the maximum extent feasible in the telecommunications and information industries. In the spectrum management area, NTIA ensures that the Government's use of the spectrum is effective, efficient, equitable, and responsive to national and international requirements. Included within the spectrum management activity is the assignment of radio frequencies to Federal agencies, and the reduction and

Justification by Object Class (cont)
(Dollar Amounts in Thousands)

Object Class	1987 Revised Base			1987 Estimate			Inc. (+) or Dec. (-)		
	Pos.	Work Years	Amount	Pos.	Work Years	Amount	Pos.	Work Years	Amount
25.0 Other Services									
Training:									
Office of Personnel Management..............			$ 10			$ 10			...
Other....................			29			29			...
Working Capital Fund......			412			412			...
Other Federal Agencies:									
National Oceanic and Atmospheric Admin....			173			173			...
National Bureau of Standards..............			394			399			+$5
Other....................			82			82			...
Maintenance of equipment..			102			102			...
GSA reimbursable services................			35			35			...
Other services............			231			377			+146
Total, other services.....			1,468			1,619			+151
26.0 Supplies and materials									
Office supplies...........			159			160			+1
ADP supplies..............			40			41			+1
Total, supplies and materials...............			199			201			+2
31.0 Equipment									
ADP equipment.............			40			45			+5
Other equipment...........			30			32			+2
Equipment depreciation....			155			155			...
Total, equipment..........			225			232			+7

National Telecommunications and Information Administration

CONSOLIDATED CONSULTING AND RELATED SERVICES
(Obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$ 95	$ 118	$ 118
Management and professional services	...	...	...
Special studies and analysis	1	...	...
Management and support services for research and development	290	113	113
Total	$ 386	$ 231	$ 231
Amount withheld from obligation pursuant to P.L. 99-190	...	-23	...
Total	$ 386	$ 208	$ 231

Consulting services: NTIA utilizes consultants throughout its programs to provide scientific or technical expertise in specialized areas.

Examples of the type of work include:

Spectrum Policies - for telecommunications experts to participate in the Frequency Management Advisory Council.

Public Telecommunications Facilities Grant Program - review and evaluate grant applications in FY 1985.

Special studies and analyses: Specific contracts vary from year to year.

Examples of the type of work include:

International Policies - perform study of the U.S. international information services industry.

Spectrum Analysis - perform a study to define band efficiency.

National Telecommunications and Information Administration
Salaries and expenses

PERIODICALS, PAMPHLETS, AND AUDIOVISUAL PRODUCTS
(Obligations in thousands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	$ 0	$ 0	$ 0	$ 0
Pamphlets	0	0	0	0
Audiovisuals	0	0	0	0
Total	$ 0	$ 0	$ 0	$ 0

National Telecommunications and Information Administration

CONSOLIDATED SCHEDULE OF AVERAGE GRADE AND SALARY

	1985 Actual	1986 Estimate	1987 Estimate
Average ES salary	$67,786	$67,744	$67,744
Average GS grade	11.19	11.25	11.11
Average GS salary	$37,858	$37,732	$37,349

avoidance of present or projected radio interference affecting various Federal agencies. NTIA also conducts applied research and analysis to support the efficient use of the spectrum, and develops technical performance standards to facilitate competition in telecommunications products and services.

NTIA'S INTERNATIONAL ACTIVITIES

In the international arena, NTIA will continue to be involved in telecommunications policy issues vital to increasing market opportunities for U.S. firms abroad and fostering technological innovation. Our efforts to ensure American companies a fair chance to participate in the Japanese telecommunications and information markets have met considerable success. Our efforts regarding Japanese markets will serve as a model for other bilateral and multilateral discussions aimed at reducing barriers to American competition in other countries including West Germany, Italy, and Spain.

We will also continue our emphasis on preparing for international telecommunications conferences by providing technical leadership and support for U.S. delegations to the International Telecommunication Union of the United Nations. This international forum has become increasingly important, as Third World telecommunications service demands on available spectrum have grown. Conference preparations underway include: the High Frequency Broadcasting Conference (1987), the Mobile Services

Conference (1987), the Space Conference (1988), the World Administrative Telegraph and Telephone Conference (1988), and the Plenipotentiary Conference (1989). A wide range of U.S. private sector and Government interests will be directly affected by the decisions made at these conferences. We are currently involved in a number of bilateral discussions and other preparatory meetings in order to establish U.S. positions prior to these conferences.

An increase over the FY 1986 appropriation of $500,000 will support international trade development, bilateral negotiations, and increased conference preparation activities. As a result, work in this area will increase slightly.

CONCLUSION

The efforts just described present some of the highlights of NTIA's activities. In conclusion, we urge the Subcommittee to support the budget request for 1987 and the proposed rescission of 1986 PTFP funds. My colleagues and I will be happy to respond to any questions which you may have.

Biography

RODNEY L. JOYCE

Acting Assistant Secretary of Commerce
for Communications and Information

Rodney L. Joyce in October 1985 was appointed Deputy Assistant Secretary of Commerce for Communications and Information and Deputy Administrator of the National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce. In November 1985, Mr. Joyce was named Acting Assistant Secretary and Acting Administrator.

For the four years prior to his appointment, Mr. Joyce served as Minority Counsel to the Subcommittee on Telecommunications, Consumer Protection, and Finance, U.S. House of Representatives (1981-85). For the three years before he became Minority Counsel, Mr. Joyce was an attorney with the law firm of Kirkland & Ellis in Washington (1979-81). He served as an attorney with the Federal Communications Commission during the period 1976-79.

Mr. Joyce received his Juris Doctor degree with honors in June 1976 from Washburn University, Topeka, Kansas.

Mr. Joyce was born May 20, 1951 in Garden City, Kansas and with his wife, Jane, lives in Washington, D.C.

PUBLIC TELEVISION COVERAGE

Mr. **Smith**. Do all of them have what you consider satisfactory public television available? Some of them have pretty shoddy service, don't they?

Mr. **Joyce**. No, I think the 97 percent figure represents the number of people living within the adequate service area of the television or radio stations.

I think, but I am not positive about this, but I believe that the 97 percent or the 95 percent figure for television represents those people living within what they call the grade B contour of a television station, which is the area that receives generally good service, and also includes those people who receive public broadcasting service by way of cable television, and, in those cases, the service quality is, of course, superior.

Mr. **Smith**. Of course, the 5 percent you are talking about, none of them have cable television?

Mr. **Joyce**. That would be correct.

Mr. **Smith**. Well, what is so difficult about extending service to the other 5 percent?

Mr. **Joyce**. Well, two things. Most of those people or a great number of that 5 percent live in areas of the country that are so sparsely populated that it just doesn't make economic sense for licensees.

Mr. **Smith**. You already have a station operating; how much does it cost to beam up to them?

Mr. **Joyce**. Let me refer that question to Mr. Connors, acting director of the program.

Mr. **Connors**. Part of the problem has been that you need community support and interest to start a station in some of these remote areas.

Mr. **Smith**. You are talking about a full station?

Mr. **Connors**. A full station, and sometimes just the extension for people who want to extend it to other areas. We haven't had a demand to utilize all of the available funding in remote areas. In other areas we have licensing problems, interference problems, and the applicants can't qualify for a license from the FCC.

Where we know there are substantial uncovered areas, the community has not come in and said that they want public television or radio in that area.

We have been funding all who have asked for FCC licenses and are qualified.

Mr. **Smith**. There are areas that are not served and all they would need is the ability to receive the signal for a station that is already operating, right?

Mr. **Connors**. Yes. One example I think is in the western states, Nevada, Montana and the like; there is a low-power television group providing rural television service, and they have been trying to extend service in the western regions. But they have FCC licensing problems with low power in just trying to get a minimum signal into the area, first getting community support plus going through the FCC and getting construction permits.

Even in those rural type areas, even for a minimum signal, it is still a problem getting licenses.

Mr. SMITH. Maybe it is still a problem, but isn't that where some grant money is still needed?

BUDGET PRIORITIES

Mr. JOYCE. We look at it in terms of the priorities of the budget generally. The program was established to develop the public broadcasting infrastructure. It has, several years ago, largely accomplished that.

Certainly, you are absolutely correct, not 100 percent of all Americans have available to them public broadcasting service. That is correct, and probably will be correct into infinity. But 97 percent of all Americans have public broadcasting service available to them, and thus the program has largely accomplished its purpose, in our view.

Accompany that with the fact that the total resources available to the public broadcasting industry in this country have increased far in excess each year of the inflation rate for the previous year, and we just think that in terms of the priorities of the Federal Government this program should be a little lower on the list at this point.

APPLICATIONS

Mr. SMITH. Now, this $21.6 million, you have applications that would more than use that amount of money?

Mr. JOYCE. Yes, we do. We have applications that total about $90 million.

Mr. SMITH. Give me a description of the kinds of applications you have, the kinds of people that want this.

Mr. JOYCE. I will ask Dennis to do that, if he will.

Mr. CONNORS. In terms of the applications, we have received requests for approximately $20 million from applicants who want to try to extend coverage.

Mr. SMITH. To areas that are not now covered?

Mr. CONNORS. Yes, either a new station or trying to extend coverage from an existing station.

In 1985, we had a comparable number of applicants and granted about $8 million for people who aren't covered in those type areas.

The rest are lower priority applicants, some who are trying to replace equipment where they have some maintenance problems and there is probably about $20 million or so in that category.

And then the rest are projects where someone wants to replace a piece of equipment in a studio or minority or women applicants looking for secondary services in a given area.

EXTENT OF COVERAGE

Mr. SMITH. These people want to extend service then and they would extend service to some of the other 3 percent, is that right?

Mr. CONNORS. That is true.

Mr. JOYCE. Yes.

Mr. SMITH. What percent of the 3 percent would be covered with $20 million.

Mr. JOYCE. I don't think we have made those calculations.

Mr. CONNORS. It is difficult to do those calculations, but it would be well under 1 percent, I believe. If the past is an indication, the largest amount of dollars would go to TV stations while areas requiring coverage are in radio. Perhaps 1 or 2 million would go towards radio coverage in the unserved areas and that would result in not much of an increase in the population reached.

Mr. SMITH. Well, if it is 20 million against another 1 percent, that is 2,380,000 people.

Mr. JOYCE. If it is 1 percent.

Mr. CONNORS. It might even be less than 1 percent if we look at the past. Because what happens is the longer the program goes on the less people are covered with more dollars.

It costs us more to cover an additional person, even though we might spend $10 million doing that, we probably aren't getting the same return for each dollar as we were earlier in the program.

Mr. JOYCE. One example of that would be that last year, 97 percent of the country was covered by public broadcasting stations, the same as this year, with some rounding errors, but it is basically the same percentage. We gave out $8 million, as Dennis said, last year, to extend service to new areas, and it is still 97 percent. So there is a point of diminishing returns.

Mr. SMITH. Well, the land area wouldn't be 97 percent.

Mr. JOYCE. Correct.

Mr. SMITH. It would be much, much smaller and so you have a whole vast area out there that is not being served.

Mr. JOYCE. A lot of cattle could receive the station that did not previously.

Mr. SMITH. Children would be in the area. We don't want to abandon the area. These people are citizens of the United States and those children have as much right to the education they get from public television. Hopefully, there is an educational service available as it is to children that live somewhere else. They didn't pick their place to live. I don't see how we can say that we have accomplished enough if we leave out two million people—more than that, 13 million people unserved. Thirteen million people is a lot of people.

EXTENDING SERVICE

I think I interpreted what you say to mean that you consider extending service to be a high priority?

Mr. JOYCE. It is. It is the number-one priority.

Mr. SMITH. Is there any alternative to getting service to these people that you see?

Mr. JOYCE. Any alternative than——

Mr. SMITH. Any alternative program or way to get service to these people other than through subsidies?

Mr. JOYCE. Than through government subsidies, you mean?

Mr. SMITH. Yes.

Mr. JOYCE. Well, one response would be that if there is really community support, ways can be found to help fund new facilities of this kind.

Mr. SMITH. What is involved in an extension of service? If a station wants to extend service to a now-unserved area, what do they do?

Mr. JOYCE. They file an application with the Federal Communications Commission to modify their license in whatever way is needed. It might be a request to put in a higher power transmitter, so that their coverage area is larger. It might be a request to make their tower taller. It might be a request to move their tower and transmitter to a different location. It might be a request to build a new station. It could be a number of things, depending upon the particular situation.

It might be expensive, it might be inexpensive, depending on the particular circumstance.

Mr. SMITH. Does it involve equipment?

Mr. JOYCE. Yes. Yes, it involves expense and it involves capital expense, capital investment, that is correct. It does require money.

Mr. SMITH. Fort West, Iowa, is a place that doesn't happen to be in the district I represent, but it is a place that has always been difficult to serve. I don't understand all the reasons why but it is an area that just gets left out.

I don't see how people that live in various counties, some of them as part of counties, are going to get together and go to some station and ask them to buy new facilities to serve them. It is a public television station. They don't get funding very easily.

How are they going to do that?

Mr. CONNORS. They do raise money on their own now before they come in to the Federal Government and they usually look for a broad community involvement aimed at raising some funds where they come into a matching environment.

Mr. JOYCE. They are required by law to raise at least 25 percent.

Mr. SMITH. The unserved area that is left is not a community; it is a series of little parts of counties and areas; they are not a community like Des Moines is a community.

You have an organization, and you can go to the metropolitan area even and do something, but when you go to one of those other areas, how are you going to get a community involved?

I don't see how you do it. Do you fund repeaters?

Mr. JOYCE. Yes, we do, and translators—different kinds of technologies can be used to extend a service into new, at present uncovered areas, and we fund all of them.

Mr. SMITH. Do you see new technology in the next two or three years permitting service to these areas much more easily than it is at the present time or not?

Mr. JOYCE. One of the technological developments generally speaking that has occurred is that new kinds of communications facilities can be installed more cheaply than before and that trend will continue into the future.

This is another reason in our judgment why now might be a good time to phase this program out; as the costs for extending service decline public broadcasting will reach these areas.

The costs of raising the necessary capital decline, while total resources available to public broadcasting facilities from all sources are increasing rapidly.

ADVERTISING

Mr. **Smith**. What is the status of the advertising argument?

Mr. **Joyce**. The public broadcasting community itself is split. Some public broadcasting stations desire authority to earn additional supplemental revenues through that means. Others object and don't want to have that authority.

At present, it is illegal as a matter of law for any station to engage in advertising under any circumstances.

Mr. **Smith**. But they can do credits.

Mr. **Joyce**. Yes. Congress did authorize an experimental advertising program four years ago for about a 10-month period of time, and I am sorry that I don't have the actual numbers available to me now, and I don't recall them specifically, but the program was participated in by at least ten television stations around the country, small stations, large stations, big cities, small towns, and it was extraordinarily successful in terms of raising additional revenues.

It was extraordinarily successful in terms of there being a minimum amount of public objection or any negative problems. Nonetheless, Congress saw fit not to extend the advertising experiment to permit more stations to engage in it on a voluntary basis over a longer period of time.

Mr. **Smith**. Were there restrictions on the kind of advertising?

Mr. **Joyce**. Indeed, there were, and those who favor an expansion and extension of the advertising experiment also favor very strong guidelines and very strong regulations to make sure that there is no abuse.

The kind of restrictions that existed then, and the kind of restrictions that the proponents of advertising continue to favor are, number one, absolutely no interruption of programs. Number two, absolutely no more than two minutes of advertising per hour. Number three, absolutely no advertising around and between programming aimed at children, and no political advertising. A number of restrictions were in place, and continue to be advocated very strongly by those who support an expansion of the advertising experiment.

Mr. **Smith**. I continue to run into people that simply won't let their children watch network programming because of the ads. It is the product that is advertised that they object to. They don't know when that ad is coming on.

This is one of the reasons that—according to the people I hear from—that some of them watch public television entirely.

Mr. **Joyce**. As I say, the proponents of advertising on television also insist that if Congress enacts legislation to authorize public stations to advertise, that they include in the law a flat prohibition against any advertising around children's programming and no advertising interruptions of any kind of program.

Mr. **Smith**. Their advertising is so good that the kids watch the ads. Even if they are playing, they will stop and watch the ads. It is only 30 seconds, it is flashy, and it attracts their attention and they get so they memorize those ads. I think that would be a mistake if we cause people who won't let their children watch the networks, to eliminate television from their educational experience.

I have got a number of questions that I think we will just submit for the record.

Thank you.

Mr. Joyce. Thank you.

[Questions for the record follows:]

Questions for the Record by Congressman Smith

NTIA-FCC Long Range Plans

QUESTION:

NTIA's budget refers frequently to its goal of developing, in conjunction with the FCC, long-range spectrum plans to promote effective management and sharing of the radio frequency spectrum resource. Provide the current long range NTIA-FCC spectrum management plan for the record. When will this plan be updated?

ANSWER:

NTIA has completed coordination of its initial draft of the "Long-Range Plan for Management and Use of the Radio Spectrum" with the FCC staff and Federal departments and agencies. It is presently being reviewed within the Department of Commerce. NTIA will provide a copy of the initial Plan to the Committee as soon as it is ready.

Frequency Management

QUESTION:

The NTIA budget refers to on-site compliance inspections and reviews that it conducts to ensure that federal agencies are making authorized use of frequency assignments.

a. How many of these inspections and reviews does NTIA make annually?

b. How many times has NTIA issued a formal warning to an agency or canceled a frequency assignment because of unauthorized or inefficient use?

c. What power does NTIA have to enforce authorized and efficient use of assigned frequencies?

ANSWER:

a. In a representative year, NTIA performs 15 to 19 inspections and reviews. There have been less these past few years because of enhancements required to the Radio Spectrum Management System van, which is used on-site to collect data.

b. NTIA's role and objective is to effectively manage the Federal Government's use of the electromagnetic spectrum and provide frequency assignments and support to other Federal agencies. When unauthorized or perceived inefficient use of the spectrum by another Federal agency is encountered our role and goal is to work closely with the Interdepartment Radio Advisory Committee (IRAC) and/or the Frequency Assignment Subcommittee (FAS) representative of the Federal agency involved to rectify the situation. This approach has proven successful during the last 30 years and consequently it has not been necessary to revoke a frequency assignment.

c. NTIA can enforce authorized and efficient use of assigned frequencies because NTIA has the power to assign and revoke the frequency assignment. This power is derived from the Communications Act of 1934, which gives the President the authority to assign frequencies. This authority has been delegated, through Executive Order 12046, to the Secretary of Commerce to "assign frequencies to radio stations or to classes of radio stations belonging to and operated by the United States, including the authority to amend, modify, or revoke such assignments". The Secretary of Commerce then designated NTIA to carry out this function through Departmental Administrative Order 10-10. When a frequency is denied or revoked, the only appeal is to the President who has delegated the appeal authority to the Office of Management and Budget.

NTIA Studies

QUESTION:

This past year NTIA issued two comprehensive studies--one on domestic communications policy and the other on the benefits of competition. Please provide the estimated cost to prepare each of these studies.

ANSWER:

The estimated cost to prepare both the Domestic Telecommunications Policy Study and the NTIA Competition Benefits Report is $150,000. This estimate consists primarily of NTIA staff resources, with minimal other costs (such as printing). No contractual arrangements were made for additional support from outside NTIA.

Gramm-Rudman-Hollings

QUESTION:

For the current and next fiscal years, what specific NTIA programs, projects and activites will be cut or eliminated to meet the reductions required by the Balanced Budget and Emergency Deficit Reduction Act of 1985 (P.L. 99-177, Gramm-Rudman-Hollings)?

a. Will the reductions result in NTIA not effectively carrying out any basic agency mission?

b. Which of the programs, projects and activities being reduced will cause the greatest negative impact on NTIA's operations? What economies taken will reduce adverse impact? Can we expect reprogramming of funds in this effort?

c. Have you identified high-priority activities which NTIA will try to insulate from the mandated cuts? If yes, list these priorities and activities?

d. How many full-time employees must NTIA lose to meet reduction targets?

e. What is the potential for furloughing NTIA employees during FY 1986 and FY 1987? How many furlough days are expected per employee?

ANSWER:

Public law 99-177 (Gramm-Rudman-Hollings) requires all civilian agencies to reduce 1986 new budget authority by 4.3%. Although these reductions must be implemented by line item, NTIA has tried to mitigate the program effect and ensure that the reductions will not result in a reduction-in-force or premature termination of existing activities.

a. Despite these reductions, NTIA will continue to perform basic agency mission activities.

b. As mentioned above, NTIA has tried to mitigate the program effect of these reductions and ensure that the negative impact on operations is held to a minimum. The primary methods for achieving these reductions will be attrition and accompanying delays in filling vacancies. No reprogramming of funds is anticipated.

c. Despite these reductions, NTIA will be able to fund all high priority activities.

d. Delays in filling current vacancies combined with anticipated attrition of approximately eight full-time employees will enable NTIA to absorb these reductions.

e. No furloughs of NTIA employees are anticipated during FY 1986. The FY 1987 President's Budget is not based upon any required furloughs.

NTIA Staffing/Personnel Management

QUESTION:

The following questions are related to NTIA staffing and personnel management.

a. What is the average grade level for NTIA staff for each of the last five years?

b. How much is included in the FY 1987 budget for awards and SES bonuses? For training?

c. What percentage of NTIA's SES staff have left the agency during the last 3 years?

ANSWER:

a. The average grade level for NTIA's staff has remained fairly constant over the last five years:

FY 1983	FY 1984	FY 1985	FY 1986(Est.)	FY 1987(Est.)
11.24	11.08	11.19	11.25	11.11

b. The FY 1987 budget includes $24,000 for awards and SES bonuses. Training funds of $39,000 are included.

c. Although NTIA has had no net decrease in SES staff over the last 3 years, approximately 20% of the SES staff have left the agency.

Authorizing Legislation

QUESTION:

What is the status of NTIA's 1987 authorizing legislation? Does it propose any activities not planned for in your 1987 budget proposal?

ANSWER:

NTIA does not presently have any authorizing legislation for FY 1987 for the Salaries and Expenses account. The Public Telecommunications Facilites Program (PTFP) authorization for FY 1986, 1987, and 1988, was signed to law Monday April 7, 1986. The FY 1987 President's Budget does not include a request for funds for PTFP.

Contractual Services

QUESTION:

What is the total amount NTIA plans to spend on outside contractual services (object class 25) in FY 1987?

a. Of this, how much will be procured non-competitively? Please provide a listing and detailed explanation for each non-competitive contract.

b. How much of the contracting expenditure will be on consultants? List these contracts for the record.

c. In compliance with the provision in the P.L. 99-190 continuing resolution, did you take a 10 percent cut in consulting services? Which contracts were reduced and by what amounts?

ANSWER:

Object Classification 25, Other Services, includes contractual services as well as computer software, other ADP estimates, research and development support services, and items not otherwise covered. NTIA estimates outside contractual services of approximatly $150,000 in FY 1987. This estimate is based upon the amount estimated for FY 1986, which included:

Frequency Management Advisory Council	$ 10,000
Telecommunications Protocol with China	50,000
Telecommunications Coordination Workshop	30,000
High Frequency Broadcasting support	16,000
Millimeter Wave equipment performance	27,000
Total	$133,000

a. Although NTIA's contractual efforts have decreased substantially over the last four years, NTIA continues to support the competitive award process and uses it whenever possible. A determination of FY 1987 contracts has not been made at this time, but the Frequency Management Advisory Council (FMAC) will be non-competitive.

b. The FMAC advises the Secretary of Commerce on radio frequency spectrum allocation and assignment matters and the means by which the effectiveness of Federal Government frequency management may be enhanced. Due to the highly specialized nature of FMAC, members are selected for their individual and collective mix of technical expertise in radio spectrum management issues. Other contracts for FY 1987 have not been determined at this time.

c. NTIA has taken an FY 1986 consulting services reduction of $23,000 (10% of the Other Services section of Object Classification 25). The Telecommuncations Coordination Workshop will be eliminated to allow NTIA to absorb this reduction unless there are other changes later in the year.

Questions for the Record by Congressman Rogers

Public Telecommunications Facilities Program

QUESTION:

What is your position on the provision in the Reconciliation bill repealing the provision that 75% of PTFP funds must be spent on new facilities?

ANSWER:

The highest priority of the Public Telecommunications Facilities Program is to fund new facilities. The repeal of the 75% provision will not affect that priority.

QUESTION:

How would you assess the condition of many of the transmitters at existing educational TV stations? What do you plan to do to help keep these stations operating as intended by the new legislation?

ANSWER:

No PTFP public TV applicant has gone off the air permanently due to a non-working transmitter. Our best assessment of the condition of existing TV transmitters is the number of applicants we receive each year under PTFP's Priority II, which is designed to assure that stations providing the only public broadcasting service in an area can replace these "essential broadcast facilities." In 1985, we funded 13 replacement TV transmitters. We believe, however, that the funding of capital replacement, in normal business practice, is part of prudent budgeting and should not depend upon Federal Government funds. Public broadcasting entities should cover such operational costs at the local level.

Must-carry Rules

QUESTION:

Under the recently negotiated must-carry agreement, what can we do to protect the educational tv stations?

ANSWER:

We understand that the educational television stations are negotiating with those private parties who have agreed on a new must-carry proposal for inclusion in that new scheme. NTIA is following those negotiations with interest, because of our longstanding concern about educational television, and because of our role as administrator of the Public Telecommunications Facilities Program. NTIA is also analyzing the industry proposal to determine its impact on several segments of the broadcasting industry, including educational television.

QUESTION:

Should the FCC add them to the must-carry rules when they finalize them?

ANSWER:

The FCC's docket is open pending the receipt of public comments. NTIA will make its specific views known in a public filing with the Commission, prior to April 25,1986.

QUESTION:

How does NTIA see its role in this situation--could it work to help make sure that educational stations are added to the must-carry rules?

ANSWER:

We understand that the educational television stations are negotiating with those private parties who have agreed on a new must-carry proposal for inclusion in that new scheme. NTIA is following those negotiations with interest, because of our longstanding concern about educational television, and because of our role as administrator of the Public Telecommuncations Facilities Program. NTIA is also analyzing several segments of the broadcasting industy, including educational television. Comments on the industry proposal will be taken by the Commission until April 25, 1986 and NTIA will make its specific views known at that time in a public filing. NTIA's role in this situation will be determined by the analysis of the industry proposal and the results of the efforts by the educational television stations to be included. We have a longstanding concern about educational television, but we cannot take a position until our comments are filed.

WEDNESDAY, MARCH 19, 1986.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

WITNESSES

ANTHONY J. CALIO, ADMINISTRATOR

JAMES E. DOUGLAS, JR., ACTING DEPUTY ASSISTANT ADMINISTRATOR, NATIONAL MARINE FISHERIES SERVICE

RICHARD E. HALLGREN, ASSISTANT ADMINISTRATOR, NATIONAL WEATHER SERVICE

WILLIAM P. BISHOP, ACTING ASSISTANT ADMINISTRATOR, NATIONAL ENVIRONMENTAL SATELLITE DATA AND INFORMATION SERVICE

ALAN R. THOMAS, DEPUTY ASSISTANT ADMINISTRATOR, OFFICE OF OCEANIC AND ATMOSPHERIC RESEARCH

PAUL M. WOLFF, ASSISTANT ADMINISTRATOR, NATIONAL OCEAN SERVICE

JOHN J. CAREY, DIRECTOR, OFFICE OF BUDGET AND FINANCE

KATHLEEN J. CHARLES, DEPUTY DIRECTOR, OFFICE OF BUDGET AND FINANCE

KATHERINE M. BULOW, ASSISTANT SECRETARY FOR ADMINISTRATION

CORA P. BEEBE, DIRECTOR, OFFICE OF PLANNING, BUDGET AND EVALUATION

MARK E. BROWN, DIRECTOR, OFFICE OF BUDGET

Mr. SMITH. This afternoon we review the budget request for National Oceanic and Atmospheric Administration. The 1987 budget request is for $917,779,000. That represents a decrease of $203,251,000 from the adjusted appropriation for 1986.

The sequestration here totals $51,919,000. The rescissions that are before the committee are $63,323,000.

Here to testify is Mr. Calio, the Administrator of NOAA.

Do you have a statement?

Mr. CALIO. I would like to submit my prepared statement for the record, sir. I have a few points I would like to highlight, if I may.

Mr. SMITH. All right.

Mr. CALIO. Thank you, Mr. Chairman.

I apologize for being late. It seems to be that season of the year again when we have tourists all over the Capitol.

NOAA BUDGET REQUEST

Mr. Chairman and members of the committee, I am privileged to present to your committee the President's fiscal year 1987 budget request for the National Oceanic and Atmospheric Administration, NOAA.

Our total budget appropriation request for fiscal year 1987 is $916 million. Our budget appropriation for fiscal year 1986 was $1.181 billion. This year's request is 23 percent less than last year's appropriation, in keeping with the President's overall effort to reduce the Federal deficit and maintain essential government services.

We are all coping with the belt-tightening it takes to reduce spending. In the case of NOAA, that challenge is met by the commitment of our people to do their jobs well.

The business of NOAA is safety. The people of NOAA are trained in such specialties as charting or weather or fish management or ocean and coastal science. Because of their commitment to the safety and best interests of our citizens, they make economies to streamline our agency while strengthening our services.

The meteorologists, engineers, geodesists, marine biologists and oceanographers, as well as their support staff, know that the American citizens need reliable and accurate data. Quality information results in the protection of life and property. Sometimes with reluctance, but always with conviction, NOAA will make reductions in costs to conform with the mandate of the President and the will of the American people.

The President defines the cutting of the Federal deficit as a national obligation. I support that. NOAA provides services that also qualify as national obligations.

NATIONAL WEATHER SERVICE

On the matter of the National Weather Service, our national obligation is clear. You can assure your constituents that what we are seeking for the National Weather Service directly affects their well-being.

In our request for $916 million is included $77.5 million from the Airport and Airway Trust Fund to maintain the aviation weather and NEXRAD programs. We all remember the air disasters of last summer and before. We have the technology now to cope with wind shears, and we are going to be able to deploy the necessary equipment in our nation's airports.

We can upgrade our hurricane reconnaisance instruments and forecasts. We have an obligation to our citizens to give them accurate predictions that pinpoint the area to be affected. Americans across the country were fascinated by the way Dr. Neil Frank made hurricanes comprehensible. Americans living in areas struck by Gloria feel a huge debt of gratitude for the orderly method of evacuation made possible by reliable forecasts. It is not perfect yet. Nature has a way of keeping us humble.

This budget request continues full support for the procurement of the next series of geostationary satellites—GOES I-M—to assure the availability of continuous weather observations from space through the late 1990s. We have reduced our estimate for the overall cost of this program by $100 million.

But the benefits to us and our children are incalculable. People will no longer roll their eyes when the weather doesn't comply with predictions. Taking precautions for severe weather will become as routine as fire drills.

We all know that America is a huge and varied land. You know better than others that our weather patterns are colossal in the same proportion. We cannot be content with five-day forecasts when we have to anticipate hurricanes, cyclones and related severe weather.

Visiting the sites hit by flash floods in West Virginia was an experience I will never forget. Any of you who want to tour the World Weather Building with me will meet people who do not take weather as business as routine. Your constituents are well-served, and I am proud of the devotion to duty displayed by the people of the National Weather Service.

FISH MANAGEMENT

What we are doing in the fish management area is to pursue a strong and responsive policy. Here is a case where defining national obligations is crucial. We must determine what is government's role and what level of government best addresses the program. For example, I do not believe that all fishery programs have a national scope. The States, localities and industry should assume the responsibility for the costs of certain activities.

The fiscal year 1987 budget proposal will support the Pacific Salmon Treaty effort, the establishment and updating of management plans for the major U.S. fisheries, and a five-year program to study the Eastern Tropical Pacific dolphin. These are proper areas in which the Federal Government should operate.

In line with the President's directive, and in the spirit of reducing cost and ranking our priorities, we are funding these efforts with savings from all areas of NOAA. I get varying estimates in my office of the size of the fishing constituency. All I can tell you is the combined, and sometimes overlapping, interests of commercial and recreational fishing is enormous.

I don't take conservation responsibilities lightly, and I do enough negotiating with other countries on fishing quotas to know our obligations commercially.

OCEAN RESEARCH

As you also know, the oceans are a vast and mysterious entity. We are making advances in understanding and predicting the devastating effects of the El Nino phenomenon through the International Tropical Oceans and Global Atmosphere, TOGA, program. We are making progress in understanding global atmospheric chemistry, including the study of trace gases and their contribution to the greenhouse effect about which you and some of your more enlightened constituents are displaying an increased curiosity.

I welcome your questions about what we are doing at NOAA and how we do it. Preparing our budget request was a herculean task for me and my people. One of the results is a commitment to study all aspects of NOAA to identify what we can do better and cheaper.

Mr. Chairman, I am prepared to answer any questions by this subcommittee.

[The statement of Mr. Calio and the justifications follow:]

STATEMENT BY THE ADMINISTRATOR OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ANTHONY J. CALIO

BEFORE THE HOUSE APPROPRIATIONS SUBCOMMITTEE
COMMERCE, JUSTICE, AND STATE, THE JUDICIARY
AND RELATED AGENCIES

March 19, 1986

Mr. Chairman and members of the Committee

I am pleased to appear before you today in support of the President's FY 1987 budget request for the National Oceanic and Atmospheric Administration (NOAA).

Our total budget appropriation request for FY 1987 is $916.0 million, which includes the transfer of $77.5 million from the Airport and Airway Trust Fund to fund the Aviation Weather and NEXRAD programs. In addition, we are proposing $66.1 million in financing from other sources.

The FY 1987 budget request for NOAA is consistent with the President's overall effort to reduce the Federal deficit, while at the same time maintaining essential governmental services.

I am pleased that our FY 1987 budget proposes funding for the acquisition of the Next Generation Radar (NEXRAD) and development of two major automated systems for the National Weather Service (NWS). These systems will help us modernize the NWS with the latest technology and science to improve our severe weather and flood warnings and forecasts to the Nation. Our FY 1987 budget also increases funding to take advantage of exciting opportunities in research on global atmospheric chemistry and in hurricane prediction. Overall our budget addresses the future needs of NOAA and provides the necessary funding to move forward.

I have carefully studied all NOAA programs and I want to assure you and all the members of the Committee that we will continue to meet our national obligations and legislated mandates.

My focus as NOAA Administrator will be to stress the concept of "national obligations". I plan to use this concept as a barometer to measure the appropriateness of NOAA programs and plans, now and in the future. I agree with the President that eliminating the federal deficit is one such national obligation.

Having said this, I do not believe that wholesale across-the-board cuts are the best way to determine program funding levels. We must decide what is Government's role in each program area.

There are many things that NOAA should not be underwriting. For example, I do not believe that all of our current fishery programs need to be carried out by the Federal government. There are also other programs such as Coastal Zone Management grants to states, Sea Grants to Universities, and subsides to industry for Landsat that are not the responsibility of the Federal government. These programs are all proposed for termination in this request. The states, localities and industry should be assuming responsibility for the costs of certain activities currently paid for by the American taxpayer.

In the areas where the Federal government has a clear responsibility, I am committed to excellence, and intend to see that commitment through. As I have indicated, we will continue to upgrade our weather service capabilities. We are reassessing our oceans programs with an eye toward strengthening NOAA's activities in these areas. We are going to ensure that our research and development program addresses national priorities in the oceanic and atmospheric sciences.

NOAA programs: provide essential public services for the protection of life and property; manage and conserve our fishery and ocean-related resources; provide governments and industry with scientific data and information required for decision-making; and promote advancement in technology and our understanding of the oceans and atmosphere.

NOAA will continue to move ahead with strong research efforts in FY 1987. Excellent progress has already been made in several areas in FY 1986, and further advances will be made toward understanding and predicting the devastating effects of the El Nino phenomenon through the international Tropical Oceans and Global Atmosphere (TOGA) program; toward understanding global atmospheric chemistry, including the study of trace gases in the atmosphere and their contribution to the "greenhouse effect"; and, NOAA will continue to play a major role in the national acid rain research program. Sufficient funds have been included in the 1987 request for these ongoing research efforts.

During FY 1987, NOAA will continue progress in the modernization of the National Weather Service. This effort will include funding of FY 87 requirements for the development of an automated surface observing system (ASOS), the design of an interactive communications and data processing system (AWIPS), and testing and production of the next generation radar (NEXRAD).

We will continue efforts begun last year to develop an operational wind profiler and plan to accelerate R & D on a complementary system to measure temperature and water vapor. If this system proves successful, we may be able to replace the current costly upper air observation network maintained by the National Weather Service. We also plan to accelerate efforts to implement a new hurricane prediction system for improved forecasts of landfall and storm intensity, and upgrade the instrumentation aboard our hurricane reconnaissance aircraft.

This budget request continues full support for the procurement of the next series of geostationary satellites (GOES I-M) to stabilize the availability of continuous weather observations from space through the late 1990's. These satellites will have improved sensor capabilities to maintain surveillance and assist in the prediction of severe storms such as hurricanes and tornadoes. Previous estimates for the overall cost of this program have been reduced by $100 million beginning in 1988. The request provides for the establishment of an operational mission control center for the satellite-assisted international search and rescue program.

As part of the overall funding level proposed in this budget, NOAA intends to pursue a strong and responsive fisheries management program. The FY 1987 budget proposal will support the Pacific Salmon Treaty effort, the establishment and update of management plans for the major U.S. fisheries, and to begin a five year program to study the Eastern Tropical Pacific dolphin. The new funding required for these efforts will be offset by substantial savings identified from all areas in NOAA. We are also seeking support for needed maintenance of our facilities, and in particular our fisheries labs.

There is deep and sincere support for NOAA on Capitol Hill. I believe that the President's budget request presents a responsible NOAA budget -- one that ensures that the Agency will be able to fullfill its mission at a cost to the American taxpayer which is justifiable and reasonable.

We have an opportunity both to manage wisely and conserve the national resources that fall under NOAA's aegis. We have the opportunity and the obligation to develop those resources in an appropriate way.

Thank you Mr. Chairman, I would be happy to address any questions which you or other members of the Committee might have regarding our budget request.

DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Budget Estimates, Fiscal Year 1987
Congressional Submission

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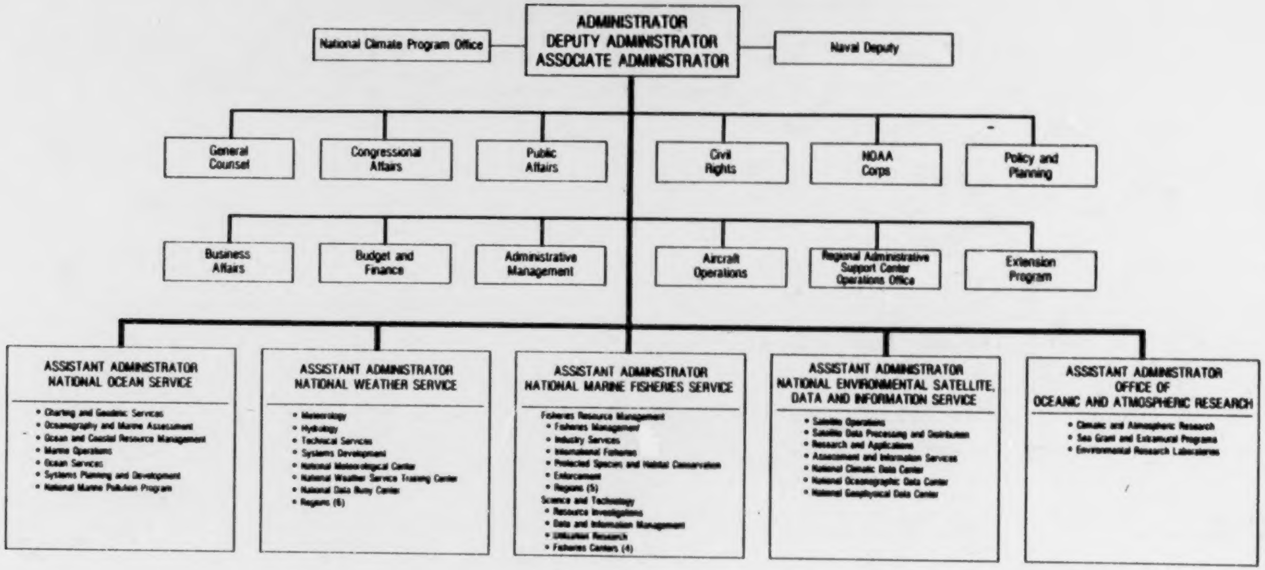
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION


ADMINISTRATOR
DEPUTY ADMINISTRATOR
ASSOCIATE ADMINISTRATOR
National Climate Program Office
Naval Deputy
General Counsel
Congressional Affairs
Public Affairs
Civil Rights
NOAA Corps
Policy and Planning
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• National Oceanographic Data Center
• National Geophysical Data Center
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• Sea Grant and Extramural Programs
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General Statement

NOAA was created by the President's Reorganization Plan No. 4 of 1970 to consolidate many of the Nation's civil programs related to the oceans and atmosphere. NOAA's broad goals include the development and operation of national programs to: (1) manage and conserve selected marine resources for the economic and social good of the Nation; (2) monitor and predict weather and environmental conditions for the protection of life and property; (3) assist states in establishing and maintaining marine and estuarine sanctuaries; (4) provide basic maps, charts, surveys, and specialized data for safe navigation; (5) provide research to advance oceanic and atmospheric technology for the better management of the environment and the rational use of our natural resources; and (6) operate satellite systems to provide national and global data and information services and products.

NOAA's management structure (see NOAA-1) consists of fourteen staff offices and five line offices -- the National Ocean Service; National Weather Service; National Marine Fisheries Service; National Environmental Satellite, Data and Information Service; and the Office of Oceanic and Atmospheric Research. The program structure consists of five major activities under the Operations, Research and Facilities appropriation, and several fishery funds. The five major activities are ocean and coastal programs; marine fishery resource programs; atmospheric programs; satellite and environmental data and information services; and program support. The fishery funds were established to provide American fishermen with financial assistance and compensation for losses.

The following is a comparison of the FY 1986 appropriations with the FY 1987 budget request.

(dollar amounts in thousands)

Appropriation title	1986 Appropriation Perm. Pos.	1986 Appropriation Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Perm. Pos.	Inc.(+) or Dec.(-) Amount	Perm. emp. 12/31
Operations, research, and facilities	11,012	$1,136,699 A/	9,315	$836,479 B/	-1,697	-$300,220	12,417
Construction	1	...	...	...	-1	...	2
Fishing vessel and gear damage compensation fund	3	...	...	...	-3	...	2
Fishermen's contingency fund	1	750	...	...	-1	-750	1
Foreign fishing observer fund	4	4,500	4	2,000	...	-2,500	1
Fishermen's guaranty fund	1	3,000	1	1,800	...	-1,200	1
Fisheries loan fund	...	...	...	...	...	...	1
Promote and develop fishery products	...	8,007	...	...	...	-8,007	...
Federal ship financing fund	20	...	...	...	-20	...	16
Aviation weather	...	28,000	...	77,500	...	+49,500	...
Subtotal	11,042	1,180,956	9,320	917,779	-1,722	-263,177	12,441
Proposal for later transmittal:							
Fishermen's guaranty fund	...	...	-1	-1,800	-1	-1,800	
Total	11,042	1,180,956	9,319	915,979	-1,723	-264,977	

A/ Excludes financing transfers of $35,700,000 from "Promote and develop fishery products and research pertaining to American fisheries", and $8,000,000 from the "Coastal energy impact fund".

B/ Excludes: Proposed transfers of $46,000,000 from "Promote and develop fishery products and research pertaining to American fisheries"; $1,800,000 from the "Fisheries loan fund"; and $8,300,000 from the "Coastal energy impact fund"; and $10,000,000 of deobligations.

Comparison of 1986 Congressional Action and 1987 Request

(dollar amounts in thousands)

Appropriation title	1986 Appropriation* Budget Authority	1986 Appropriation* Outlays	1987 Request Budget Authority	1987 Request Outlays	Inc.(+) or Dec.(-) Budget Authority	Inc.(+) or Dec.(-) Outlays
Operations, research, and facilities	$1,172,399	$1,137,086	$882,479	$1,038,821	-$289,920	-$98,265
Construction	...	1,212	...	...	...	-1,212
Fishing vessel and gear damage compensation fund	...	3,797	...	...	...	-3,797
Fishermen's contingency fund	750	750	...	...	-750	-750
Foreign fishing observer fund	4,500	5,691	2,000	1,962	-2,500	-3,729
Fishermen's guaranty fund	3,000	3,129	1,800	1,800	-1,200	-1,329
Fisheries loan fund	...	378	...	...	...	-378
Promote and develop fishery products	8,007	14,657	...	8,761	-8,007	-5,896
Coastal energy impact fund	...	-5,000	...	-5,000	...	...
Federal ship financing fund	...	-4,700	...	...	...	+4,700
Aviation weather	28,000	28,000	77,500	77,307	+49,500	+49,307
Subtotal	1,216,656	1,185,000	963,779	1,123,651	-252,877	-61,349
Proposal for later transmittal:						
Fishermen's guaranty fund	...	...	-1,800	-1,800	-1,800	-1,800
Total	1,216,656	1,185,000	961,979	1,121,851	-254,677	-63,149

*1986 Congressional amounts do not include reductions pursuant to P.L. 99-177.

Highlights of 1987 Request

The NOAA budget reflects significant proposals to recover Federal costs of providing services or seeks to shift responsibility for certain programs to the beneficiaries. Legislation to recover more of the costs associated with producing aeronautical and nautical maps and charts will be proposed. The budget continues support for key systems needed to modernize the National Weather Service. Development of geostationary satellite instrumentation to improve short-term weather forecasts and warnings is proposed, as well as an expanded procurement to ensure continuity of coverage.

The request provides increases to continue procurement and operations of a two geostationary and single polar-orbiting meteorological satellite system. Additionally, certain ground station costs formerly funded by NASA are included in the NOAA request.

Several NOAA programs are proposed for termination in 1987. Included in this group are the Sea Grant College program, grants to states and other fisheries development programs. These programs have accomplished their intended goals and should now be supported by the users and beneficiaries of their services.

Funding for the U.S. Pacific Salmon Treaty is maintained. A transfer of $1,800,000 from the Fisheries Loan Fund will be used to establish a fund for maintenance of fisheries facilities and to begin a dolphin monitoring program in the Eastern Tropical Pacific.

Beginning in FY 1987, the NEXRAD Program will be conducted as a reimbursable activity and derive its funding requirement of $47,500,000 through the FAA Airport and Airway Trust Fund. The program is described in more detail under the Aviation Weather Services Program Trust Fund.

Savings in NOAA program and administrative costs will result from several management initiatives. These initiatives are part of government-wide efforts to reduce unnecessary costs and streamline operations. Included in these savings are reductions in field administrative positions, functions identified by the productivity improvement review program as able to be performed more economically by the private sector, and general administration associated with proposed program reductions for FY 1987.

Rescissions in 1986 will reduce the Sea Grant program and terminate the Coastal Zone Management state assistance grant program.

The changes between the 1986 program and the requested 1987 program are summarized by appropriation as follows:

Operations, Research, and Facilities

Ocean and coastal programs - For FY 1986, a rescission is proposed to reduce the Sea Grant program (-$30,604,000); and eliminate the CZM state assistance program (-$36,000,000). For FY 1987, decreases will reduce Tropical Oceans-Global Atmosphere (TOGA) research (-$2,000,000); terminate the NOAA Undersea Research program (-$9,635,000); reduce research activities at the Great Lakes research laboratory (-$844,000); eliminate the research program for processes at seafloor spreading centers (-$1,800,000); reduce the Fisheries-Oceanography Coordinated Investigations (FOCI) program (-$1,000,000); reduce funds for Ocean Service Program (-$2,700,000); reduce funding for the ocean assessments program (-$5,800,000); terminate circulatory program (-$300,000); reduce tides and water levels program (-$100,000); terminate the Sea Grant program (-$8,396,000); terminate Federal support of the National Coastal Resources Research and Development Institute (-$1,250,000); defer acquisition of new estuarine sanctuaries (-$800,000); reduce on-site management activities at designated marine sanctuaries (-$700,000); reduce CZM program management (-$650,000); increase support of aeronautical and nautical charts program through user charges (-$1,318,000); and reduce geodesy technical assistance, vertical network readjustment, and state specific surveys (-$1,450,000); and terminate Federal funding for the Multipurpose Cadastre system (-$750,000).

Marine fishery resource programs - An increase is requested for dolphin monitoring in the Eastern Tropical Pacific and will be offset from a transfer from the Fisheries Loan Fund (+$800,000). Decreases are proposed for resource surveys, West Coast groundfish research, and protected species research (-$3,879,000); limnological research in Lake Mead (-$350,000); research on the effect of fisheries habitat conditions on fish stocks (-$5,133,000); SEAMAP (-$1,000,000); PCB contamination research (-$400,000); methodology for habitat evaluation and Chesapeake Bay resource assessments (-$2,500,000); and marine mammal research and right whale research (-$2,000,000). Other decreases are requested from dock facilities in Pascagoula, MS (-$500,000); MARFIN (-$2,850,000); support for the Oregon Institute of Marine Biology (-$650,000); gear entanglement studies in the Pacific (-$750,000); and work associated with the Pacific Salmon Treaty (-$1,000,000) and salmon enhancement activities (-$3,350,000). Reductions are requested for economic and commercial fisheries statistics (-$3,100,000); and for near-shore information and analysis (-$974,000). Termination of funding is proposed for Columbia River hatcheries (-$8,254,000). Reductions are also proposed for the Regional Fishery Management Councils (-$3,500,000); environmental impact analysis activities (-$2,269,000); and fisheries development activities (-$9,555,000). Termination of stock enhancement and disease research (-$3,097,000) and vessel buy-back programs are proposed (-$1,250,000). Grants to states under the Commercial Fisheries Research and Development Act (-$4,250,000) and anadromous fisheries grants (-$1,432,000) would also be terminated. A decrease of (-$656,000) is proposed for the transfer of financial services program administration activities to the Grants and Loan Administration of the Department of Commerce.

Atmospheric programs - Increases are requested to continue the Advanced Weather Interactive Processing System (AWIPS) Program (+$5,860,000), continue the Automation of Surface Observing Systems (ASOS) program (+$4,640,000), continue the Radiatively Important Trace Species (RITS) research program (+$1,000,000), augment hurricane prediction research (+$1,000,000), and accelerate research on remote sensing instrumentation (+$500,000). The Administration is proposing consolidations and other efficiencies within the National Weather Service to streamline overhead. These measures include consolidation of the Alaska and Pacific Regional Headquarters (-$407,000); and closing the Southern Region Headquarters to consolidate the four conterminous NWS regions into a three-region structure (-$852,000). Other decreases include reducing the staff at Weather Service Forecast Offices (-$836,000); funding Micronesian weather services through reimbursement by the Department of State (-$456,000); reducing services at the National Data Buoy Center (-$574,000) and Hawaii data buoy maintenance (-$600,000); and reducing meteorological technician staffing (-$576,000). The agricultural weather (-$1,000,000) and fruit frost (-$418,000) programs are proposed for transfer to the private sector, and the fire weather program for non-Federal users is proposed for reduction (-$300,000). Savings will be achieved by eliminating maintenance funding for the Colorado River Basin Warning System (-$650,000). The Administration also proposes to achieve additional savings by reducing emergency power for NOAA Weather Radio (-$400,000).

Elimination of add-on funding to upgrade the Susquehanna River Basin flood warning system is proposed (-$2,340,000). Beginning in FY 1987, the NEXRAD Program will be financed at a total level of $47,500,000 with funding derived from the FAA Airport and Airway Trust Fund. Decreases are proposed in weather-related systems development and hydrological research, Regional Observing and Forecasting Services (PROFS), state-specific weather modification activities, research on mesoscale convective precipitation systems, and Global Atmospheric Research Program (GARP) projects (-$7,840,000). A reduction is also proposed for research and services at the Solar Environmental Laboratory (-$300,000). Elimination of add-on funding to establish a Regional Climate Center in Reno, Nevada is proposed (-$800,000).

Satellite and environmental data and information services - Increases are requested to establish the ground processing segment for NESDIS Mission Control Operations for Search and Rescue (+$3,775,000); fund the GOES I, J, K, L, and M spacecraft (+$17,950,000); refurbish and upgrade existing ground system components (+$3,050,000); and for the GOES-Next ground system (+$14,100,000). Decreases are proposed for Landsat 4 and 5 operations (-$1,400,000); the normal annual fluctuations of spacecraft and launching accrued costs (-$105,629,000); and the reduced geostationary ground systems costs due to changes required for compatibility with NASA communications network (-$1,461,000). No request is included for Landsat subsidies; the Administration proposes to privatize fully this program and eliminate further funding.

Program support - Increases are requested to purchase multi-beam bathymetric survey systems for NOAA ships (+$1,100,000); to initiate overdue repairs and maintenance on major research and operational NMFS facilities which will be offset by a transfer from the Fisheries Loan Fund (+$1,000,000); for an airframe structural overhaul of one of NOAA's WP-30 Orion aircraft (+$400,000); and to provide NOAA's share of instrument upgrades on the USAF aircraft that NOAA utilizes (+$1,700,000). The Administration proposes to terminate the National Advisory Committee on Oceans and Atmosphere (NACOA) (-$500,000); close the Southeast Marine Support Facility (-$300,000); reduce ship operations for fishery research through chartering (-$4,141,000); reduce the number of days at sea and maintenance costs for other vessels and to lay up the fisheries fleet, WHITING, FERREL, and McARTHUR (-$5,317,000); reduce the complement of NOAA ships resulting in personnel savings (-$800,000); reduce the ship rehabilitation program (-$368,000); reduce the Global Positioning System program (-$200,000); and reduce funding for the maintenance and instrumentation upgrade of NOAA's aircraft (-$1,300,000).

Fishing Vessel and Gear Damage Compensation Fund

No appropriation is requested for FY 1987. The Administration believes that inappropriate Federal involvement in private sector activities should be discontinued and proposes to terminate this program beginning October 1, 1986.

Fishermen's Contingency Fund

No appropriation is requested for FY 1987. The Administration believes that inappropriate Federal involvement in private sector activities should be discontinued and proposes to terminate this program beginning October 1, 1986, and to rebate all remaining balances to the leaseholders.

Foreign Fishing Observer Fund

Recent amendments to the Magnuson Fishery Conservation and Management Act allow foreign governments to contract directly for observer services from contractors approved by the Secretary of Commerce. An appropriation of $2,000,000 combined with direct contracts is sufficient to continue the current level of coverage.

Fisheries Loan Fund

No appropriation is requested for FY 1987. The Administration proposes that the close out of this fund be accomplished by the Grants and Loans Administration of the Department of Commerce effective October 1, 1986. Balances in the fund and current receipts will be transferred to the Treasury.

Fishermen's Guaranty Fund

The Administration proposes to transfer this program to the Department of State effective October 1, 1986. A request of $1,800,000 in budget authority to be derived from receipts collected is requested for the Department of State.

Aviation Weather Services Program Trust Fund

An appropriation of $77,500,000 is requested to continue aviation weather services. This funding shall be derived by transfer from the FAA Airport and Airway Trust Fund. The appropriation request includes an increase of $2,000,000 for providing aviation weather services. Beginning in FY 1987, the Next Generation Weather Radar program (NEXRAD) will be financed through the Airport and Airway Trust Fund at a level of $47,500,000.

Appropriation Summary Statement

Appropriation: Operations, Research, and Facilities

The total funding requirement requested for FY 1987 is $902,579,000 which includes an appropriation of $836,479,000 and transfers of $1,800,000 from the "Fisheries loan fund", $46,000,000 from "Promote and develop fishery products and research pertaining to American fisheries", $8,300,000 from the "Coastal energy impact fund", and $10,000,000 from NOAA deobligations. The total funding requirement for FY 1987 represents a decrease of $277,820,000 from the total program requirement of $1,180,399,000 in FY 1986. A proposed FY 1986 rescission of $66,604,000 is reflected in the FY 1987 base funding. The FY 1987 request includes a decrease for adjustments to base and built-in changes of $26,134,000, and a net program decrease of $185,082,000.

A summary of proposed program changes and their comparative effects on program output/performance is provided below:

The "Ocean and Coastal Programs" activity provides for the management and development of the marine environment and its resources; the conservation, rational use, and charting of the Nation's coastal regions; the production of aeronautical and nautical charts; and geodetic surveys. In 1987, decreases are proposed for ocean assessments, ocean service centers, the Sea Grant program, Coastal Zone Management grants, the Geodetic Reference System, and the Undersea Research Program.

Output/performance measures:	1985 Actual	1986 Estimate	1987 Estimate
Ocean minerals:			
Licenses issued or monitored	5	4	4
Ocean research:			
Scientific and technical publications	118	110	80
Ocean and Great Lakes assessments and services:			
Location, tide levels and current predictions	8,400	8,400	8,400
Coastal zone management:			
Number of estuarine sanctuaries	15	17	18
Number of marine sanctuary sites managed and enforced	7	9	10
Mapping, charting and geodesy programs:			
Aeronautical and nautical documents maintained	11,828	12,278	12,526

The "Marine Fishery Resource Programs" activity provides for the management and conservation of the Nation's living marine resources, marine mammals, and endangered species stocks; and encourages the increased use of the resources through fishery product quality and safety research. Decreases are proposed in information collection and analyses and related research; regulatory and management operations including environmental impact analysis, and regional councils; and the fishery development and research programs. Stock assessments will not be reduced, and it is expected that current fishery management plans will be supported. The stock enhancement and disease research (aquaculture), salmon vessel buy back, and commercial fisheries grant programs are being terminated. Legislation is proposed to implement a Federal Marine recreational fishing license to be administered by the states with a guarantee of $5 for the Federal government. The states would retain any amount collected above the $5 to cover administrative costs and defer costs of state fishery programs.

Output/performance measures:	1985 Actual	1986 Estimate	1987 Estimate
Living marine resource stocks assessed	139	139	139
Fisheries management plans implemented	32	35	37

The "Atmospheric Programs" activity provides timely and accurate meteorologic, hydrologic, and oceanographic warnings, forecasts, and planning information to ensure the safety of the population, mitigate property losses, and improve the economic efficiency of the Nation; and conducts research in atmospheric and hydrologic processes and conditions to improve short-term and long-term predictions of environmental changes. Additional funding in 1987 will provide for increases in hurricane prediction, radiatively important trace species research, the Advanced Weather Interactive Processing System program, and the deployment and operation of wind profilers. Specialized weather services which can be conducted by the private sector will be reduced or eliminated. Other decreases propose to consolidate several regional headquarters; reduce solar-terrestrial services and research; and to terminate the weather modification grants program.

Output/performance measures:	1985 Actual	1986 Estimate	1987 Estimate
Percent of upper air data availability	98	98	98
Percent of charts transmitted within 2 hours of availability	94	94	94
Scientific and technical publications	452	420	402
Research/user conferences	28	25	15

The "Satellite and Environmental Data and Information Services" activity provides for the operation of a Landsat 4 and 5 system, and polar-orbiting and geostationary satellites; and provides global environmental data and information products and services to users in commerce, industry, agriculture, science, engineering, the general public, and Federal, state, and local agencies. Increases will provide for procurements of replacement satellites, the upgrade of ground systems, and the establishment of a Mission Control Center for Search and Rescue Operations. Decreases will reduce support for a two-polar satellite system.

Output/performance measures:	1985 Actual	1986 Estimate	1987 Estimate
Polar product requests serviced (percent)	95	93	93
GOES product requests serviced (percent)	97	90	90
Data user requests serviced	306,600	281,830	298,700

The "Program Support" activity provides for overall NOAA management, NOAA's share of the Regional Administrative Support Centers, and the operations and logistics support of ships, marine centers, and aircraft to support NOAA missions. Decreases in 1987 include the number of ships and days at sea, and savings resulting from the substitution of charters for the fisheries research fleet. Funding for the National Advisory Committee on Oceans and Atmosphere will be terminated. Increased funding is provided for the upgrade of instrumentation on hurricane surveillance aircraft.

Output/performance measures:	1985 Actual	1986 Estimate	1987 Estimate
Employees serviced	15,978	15,580	13,750
Procurement actions processed (including small purchases)	60,500	59,900	55,700
Marine services:			
Number of active ships (including part-year)	22	23	11
Number of days at sea	3,804	4,262	1,848
Aircraft services:			
Flight hours flown (all aircraft)	4,580	4,550	4,550

Justification of Proposed Language Changes

1. After the words "available until expended" delete the comma and insert a semicolon and delete all the words that follow through "South Dakota,"

   The $600,000 for the EROS Data Center in Sioux Falls, South Dakota is a non-recurring item and the language is no longer required.

2. After the words "Coastal Energy Impact Fund" delete the colon and insert a semicolon and the words "and in addition, $1,800,000 shall be derived by transfer from the Fisheries Loan Fund." and delete all that follows through the words "fisheries failures and disruptions."

   $1,800,000 of unobligated balances in the Fisheries Loan Fund will be transferred to reduce the need for appropriated funds.

   The deleted material made provision for (1) maintenance of a staff of three persons for procurement functions at Bay St. Louis, Mississippi and (2) funding for commercial fisheries failures and disruptions. NOAA is maintaining the three person procurement operation at Bay St. Louis and the commercial fisheries grant program is not proposed for funding in FY 1987 therefore, the deleted material is no longer required.

3. Delete all the language starting with the words "Sec. 109, Notwithstanding" and ending with the words "Warning System (IFLOWS)".

   This is a non-recurring item and the language is no longer required.

Appropriation Language and Code Citations:

1. For necessary expenses of activities authorized by law for the National Oceanic and Atmospheric Administration,

5 USC 3109
5 USC 5901
5 USC 5902
7 USC 1622
12 USC 1715m
15 USC 272
15 USC 313
15 USC 313a
15 USC 313nt
15 USC 330b
15 USC 330e
15 USC 1514
15 USC 2904
15 USC 2905
15 USC 2906
15 USC 2908
15 USC 4211
15 USC 4278
16 USC 661
16 USC 664
16 USC 665
16 USC 742d
16 USC 742f
16 USC 742g
16 USC 744
16 USC 745
16 USC 753a
16 USC 755
16 USC 756
16 USC 757a
16 USC 757b
16 USC 758A
16 USC 760a
16 USC 760d
16 USC 760e
16 USC 760f
16 USC 760g
16 USC 760h
16 USC 772d
16 USC 777
16 USC 778
16 USC 779a
16 USC 779d
16 USC 852c
16 USC 916j
16 USC 917a
16 USC 917d
16 USC 959
16 USC 986
16 USC 1027
16 USC 1083
16 USC 1100a-1
16 USC 1222
16 USC 1371
16 USC 1377
16 USC 1379 (d)
16 USC 1380
16 USC 1381
16 USC 1384
16 USC 1432
16 USC 1434
16 USC 1455
16 USC 1456a
16 USC 1461
16 USC 1464(a)
16 USC 1533
16 USC 1534
16 USC 1535
16 USC 1542
16 USC 1811
16 USC 1822(a)(4)
16 USC 1852
16 USC 1852h
16 USC 1853
16 USC 1854(e)
16 USC 1855
16 USC 1861
16 USC 1882
16 USC 3633(c)
16 USC 3636
16 USC 3641
30 USC 1412
30 USC 1419
30 USC 1424
30 USC 1428
30 USC 1469
30 USC 1470
33 USC 706 et seq.
33 USC 853a-876
33 USC 883a
33 USC 883b
33 USC 883c
33 USC 883d
33 USC 883f
33 USC 883h
33 USC 883i
33 USC 1441
33 USC 1442
33 USC 1443
33 USC 1444
33 USC 1703
33 USC 1704
33 USC 1705
33 USC 1709
37 USC 101 et seq.
42 USC 1891
42 USC 7453
42 USC 7454
42 USC 8902
42 USC 8903
42 USC 8904
42 USC 8905
43 USC 1347 (e)
49 App USC 1153

5 USC 3109 - Employment of experts and consultants; temporary or intermittent.

"When authorized by an appropriation or other statute, the head of an agency may procure by contract the temporary (not in excess of 1 year) or intermittent services of experts or consultants or an organization thereof, including stenographic reporting services."

5 USC 5901 - Uniform allowances.

This section authorizes annual appropriations to each agency of the Government of the United States, an amount for uniforms, or allowances for uniforms for employees of the agency who are required by regulation or statute to wear a prescribed uniform in the performance of official duties and who are not being furnished with the uniform.

5 USC 5902 - Increase in maximum uniform allowance.

This section increases the amounts for uniform allowances provided for in 5 USC 5901 and specifies that the increased allowances may not be reduced.

7 USC 1622 - Agricultural Marketing Act.

"The Secretary ... is directed and authorized: ...
(a) (b) (1) to determine the needs and develop or assist in the development of plans for the proper assembly, processing, transportation, storage, distribution, and handling of agricultural (fish) products.

(c) (h) to inspect, certify, and identify the class, quality, quantity and condition of agricultural (fish) products ...
(f) to conduct and cooperate in consumer education for the more effective utilization and greater consumption of agricultural products (fish) ...

(g) to collect and disseminate marketing information... for the purpose of ... bringing about a balance between production and utilization of agricultural (fish) products.

(m) to conduct ... research ... to determine the most efficient ... processes for the handling, storing, preserving, protecting...of agricultural (fish) commodities ..."

12 USC 1715m - Mortgage Insurance Payments.

This section authorizes payment of Federal Housing Administration (FHA) home mortgage insurance premiums to NOAA Corps Officers.

15 USC 272 - Functions of Secretary.

"The Secretary of Commerce...is authorized to undertake the following functions:

(b) The determination of physical constants...when such data are of great importance to scientific or manufacturing interests and are not to be obtained of sufficient accuracy elsewhere.

In carrying out the functions enumerated in this section, the Secretary is authorized to undertake the following activities and similar ones for which need may arise in the operations of Government agencies, scientific institutions, and industrial enterprises:

(12) the investigation of the conditions which affect the transmission of radio waves from their source to a receiver;

(19) the compilation and publication of general scientific and technical data resulting from the performance of the functions specified herein or from other sources when such data are of importance to scientific or manufacturing interests or to the general public, and are not available elsewhere, including demonstration of the results... by exhibits or otherwise as may be deemed most effective."

15 USC 313 - Duties of Secretary of Commerce.

"The Secretary of Commerce...shall have charge of the forecasting of weather,...issue of storm warnings,...weather and flood signals,... gauging and reporting of rivers,...collection and transmission of marine intelligence...,...reporting of temperature and rainfall conditions..., the display of frost and cold-wave signals, the distribution of meteorological information..., and the taking of such meteorological observations as may be necessary to establish and record the climatic conditions of the United States, or as are essential for the proper execution of the foregoing duties."

15 U.S.C. 313a - Duties of Secretary of Commerce.

"... The Secretary of Commerce shall ... take such actions as may be necessary in the development of an international basic meteorological reporting network in the Arctic region of the Western Hemisphere..."

15 USC 313 nt - Study of Thunderstorms and Atmospheric Disturbances; Reports; Expenditures; Cooperation of Other Departments.

"...the Secretary of Commerce is authorized and directed to study fully and thoroughly the internal structure of thunderstorms, hurricanes, cyclones, and other severe atmospheric disturbances,... with a view to establishing methods by which the characteristics of particular thunderstorms may be forecast and methods by which the characteristics of such storms may be determined on visual observation from outside of the immediate thunderstorm area."

15 USC 330b - Duties of Secretary - Records, maintenance, summaries, publication.

"(a) The Secretary shall maintain a record of weather modification activities, including attempts, which take place in the United States and shall publish summaries thereof from time to time as he determines."

15 USC 330e - Authorization of appropriations.

"There is authorized to be appropriated...not to exceed $100,000 for fiscal year 1981." This authorization is for the conducting of duties under 15 USC 330b.

15 USC 1514 - Basic authority for performance of certain functions and activities of Department.

"Appropriations are authorized for the following activities of the Department of Commerce:

(a) furnishing to employees...and their dependents, in Alaska and other points outside the continental United States, free emergency medical services...and supplies;

(b) ...purchasing, transporting, storing, and distributing food and other subsistence supplies for resale to employees...and their dependents, in Alaska and other points outside the continental United States at a reasonable value...; Provided, That a report of such transaction shall be made to Congress annually showing the total expenditures made for such supplies and the total proceeds from such resales;

(c) ...establishment, maintenance, and operation of messing facilities, by contract or otherwise, in Alaska and other points outside the continental United States..., such service to be furnished to employees...and their dependents,...

(d) reimbursement...of officers or employees in or under the Department...for food, clothing, medicines, and other supplies furnished by them in emergencies for the temporary relief of dislocated persons in remote localities;

(e) providing motion-picture equipment and film for recreation of crews of vessels..., for...employees in remote localities..., and for training purposes;

(f) erecting, altering, repairing, equipping, furnishing, and maintaining...such living quarters and facilities as may be necessary to carry out its authorized work at remote localities not on foreign soil where such living and working accommodations are not otherwise available."

15 USC 2904 - National climate program.

"The Secretary (of Commerce) shall establish within the Department of Commerce a National Climate program office...The office shall be the lead entity responsbile for administering the Program. The program shall include, but not be limited to, the following elements:

(1) assessments of the effect of climate on the natural environment, agricultural production, energy supply and demand, land and water resources, transportation, human health and national security.
(2) basic and applied research to improve understanding of climate processes,...
(3) methods for improving climate forecasts...
(4) global data collection, and monitoring and analysis activities...
(5) systems for the management and...dissemination of climatological data, information and assessments...
(6) measures for increasing international cooperation in climate research, monitoring, analysis and data dissemination;
(7) mechanisms for intergovernmental climate-related studies and services...
(8) experimental climate forecast centers,...
(9) a preliminary 5-year plan,...a final 5-year plan to be submitted to the Congress...that shall be revised and extended biennally."

15 USC 2905 - Intergovernmental climate programs.

"The Secretary shall establish a program for Federal and State cooperation activities in climate studies and advisory services. The Secretary is authorized to make annual grants to any State or group of States, such grants to be made available to public or private institutions, to State agencies and to other persons or institutions qualified to conduct climate-related studies or provide climate-related services."

15 USC 2906 - Annual report.

"The Secretary shall prepare and submit to the President and the authorizing committees of the Congress, not later than January 30 of each year, a report on the activities conducted pursuant to this Act during the preceding fiscal year..."

15 USC 2908 - Authorization for appropriations.

"...there are authorized to be appropriated to the Secretary,...not to exceed $25,500,000 for the fiscal year ending September 30, 1981, of which amount not less than $2,653,000 shall be made directly available to the National Climate Program Office..." Authorizing legislation is proposed to extend in FY 1986.

15 USC 4211 - Land Remote-Sensing Commercialization Act of 1984

"The Secretary shall be responsible for (1) the Landsat system, including the orbit, operations, and disposition of Landsat 1,2,3,4, and 5; and (2) provision of data to foreign ground stations under the terms of agreement between the United States Government and nations that operate such ground stations which are in force on the data of commencement of the contract awarded pursuant to this title." The word "Secretary" refers to the Secretary of Commerce.

15 USC 4278 - Authorization of Appropriations.

"There are authorized to be appropriated to the Secretary $295,000,000 for fiscal years 1985 through 1989 of which not more than $125,000,000 shall be available for fiscal years 1985 and 1986".

16 USC 661 - Declaration of purpose; cooperation of agencies; surveys and investigations; donations.

"...the Secretary of Commerce is authorized (1) to provide assistance to, and cooperate with, Federal, State, and public or private agencies and organizations in the development, protection, rearing, and stocking of all species of wildlife, resources thereof, and their habitat, in controlling losses of the same from disease or other causes, in minimizing damages from overabundant species, in providing public shooting and fishing areas, including easements across public lands for access thereto, and in carrying out other measures necessary to effectuate the purposes of said sections; (2) to make surveys and investigations of the wildlife of the public domain, including lands and waters or interests therein acquired or controlled by any agency of the United States; and (3) to accept donations of land and contributions of funds in furtherance of the purposes of said sections."

16 USC 664 - Administration; rules and regulations; availability of lands to State agencies.

"Such areas as are made available to the Secretary...shall be administered by him directly or in accordance with cooperative agreements entered into pursuant to the provisions of section 661 of this title and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife,..., as may be adopted by the Secretary...: Provided, That such rules and regulations shall not be inconsistent with the laws for the protection of fish and game of the States in which such area is situated:...,."

16 USC 665 - Investigations as to effect of sewage, industrial wastes; reports.

"The Secretary..., is authorized to make such investigations as he deems necessary to determine the effects of domestic sewage, mine, petroleum, and industrial wastes, erosion silt, and other polluting substances on wildlife, and to make reports to the Congress concerning such investigations and of recommendations for alleviating dangerous and undesirable effects of such pollution. These investigations shall include (1) the determination of standards of water quality for the maintenance of wildlife; (2) the study of methods of abating and preventing pollution,...; and (3) the collation and distribution of data on the progress and results of such investigations for the use of Federal, State, municipal, and private agencies, individuals, organizations, or enterprises."

16 USC 742d - Investigations; preparation and dissemination of information; reports.

"The Secretary shall conduct...investigations, prepare and disseminate information, and make periodic reports to the public, to the President, and to Congress, with respect to the following matters:

(1) the production and flow to market of fish and fishery products...;
(2) the availability...of the biological requirements of the fish and wildlife resources;
(3) the competitive economic position of the various fish and fishery products,...;
(4) the collection and dissemination of statistics on commercial and sport fishing;
(6) the improvement of production and marketing practices...;
(7) any other matters which in the judgment of the Secretary are of public interest in connection with any phases of fish and wildlife operations."

16 USC 742f - Policies, procedures, and recommendations.

"(a) The Secretary..., shall consider and determine the policies and procedures that are necessary and desirable in carrying out...the laws relating to fish and wildlife. The Secretary,..., shall -

(1) develop and recommend measures which are appropriate to assure the maximum sustainable production of fish and fishery products...;

(2) study the economic condition of the industry, and...make such recommendations to the President and the Congress as he deems appropriate to aid in stabilizing the domestic fisheries;

(3) develop and recommend special promotional and informational activities with a view to stimulating the consumption of fishery products whenever he determines that there is a prospective or actual surplus of such products;

(4) take such steps as may be required for the development, advancement, management, conservation, and protection of the fisheries resources; and

(5) take such steps as may be required for the development, management, advancement, conservation, and protection of wildlife resources through research, acquisition of refuge lands, development of existing facilities, and other means."

16 USC 742g - International Affairs.

"The Secretary shall cooperate...with the Secretary of State in providing representation at all meetings ... relating to fish and wildlife in which ... the United States and foreign countries participate."

16 USC 744 - Investigations; fish propagation; annual statement of expenditures; investigations of damages by predacious fishes; executive assistance.

"The Secretary...shall prosecute investigations and inquiries..., with the view of ascertaining whether any and what diminution in the number of the food fishes of the coast and lakes of the United States has taken place;...what causes the same...;...whether any and what protective, prohibitory, or precautionary measures should be adopted...; and he shall submit annually to Congress...a detailed statement of expenditures...and he is authorized...to conduct investigations... for the purpose of ameliorating the damage wrought...by dogfish and other predacious fishes and aquatic animals."

16 USC 745 - Powers of Secretary.

"The Secretary...may take or cause to be taken at all times, in the waters of the seacoast of the United States,..., such fish or specimens thereof as may in his judgment, from time to time, be needful or proper for the conduct of his duties, any law, custom, or usage of any State to the contrary notwithstanding."

16 USC 753a - Cooperative research and training programs for fish and wildlife resources.

"For the purpose of developing adequate, coordinated, cooperative research and training programs..., the Secretary...is authorized...to enter into cooperative agreements with colleges and universities, with game and fish departments of the several States, and with nonprofit organizations relating to cooperative research units."

16 USC 755 - Salmon cultural stations; establishment; expenditure of funds.

"The Secretary...is authorized and directed to establish one or more salmon cultural stations in the Columbia River Basin in each of the States of Oregon, Washington, and Idaho."

16 USC 756 - Investigations, surveys, and experiments; construction and installation of conservation devices, etc.

"The Secretary...is further authorized and directed (1) to conduct such investigations...as may be necessary...of the fishery resources of the Columbia River and its tributaries; (2) to construct and install devices...for the improvement of feeding and spawning conditions..., for the protection of migratory fish from irrigation projects,...facilitating free migration of fish...and (3) to perform all other activities necessary for the conservation of fish in the Columbia River Basin in accordance with law."

16 USC 757a - Anadromous and Great Lakes fisheries.

(a) Conservation, development, and enhancement; cooperative agreements with States and other non-Federal interests; terms and conditions; Federal and non-Federal costs.

"For the purpose of conserving, developing, and enhancing within the several States the anadromous fishery resources of the Nation... the Secretary...is authorized to enter into cooperative agreements with one or more States, acting jointly or severally, that are concerned with the development, conservation, and enhancement of such fish, and, whenever he deems it appropriate, with other non-Federal interests."

16 USC 757b - Anadromous and Great Lakes Fisheries; investigations, surveys, and research; stream clearance activities; conservation devices and structures; fish hatcheries; studies, recommendations, and reports to States, Congress, and Federal water resources construction agencies; water resources projects; property: acquisition, exchanges, cash equalization payments, donations, administration, and title.

"The Secretary, in accordance with any agreements entered into pursuant to section 757a(a) of this title, is authorized (1) to conduct such investigations, engineering and biological surveys, and research as may be desirable to carry out the program; (2) to carry out stream clearance activities; (3) to construct, install, maintain, and operate devices and structures for the improvement of feeding and spawning conditions,...(4) to construct, operate, and maintain fish hatcheries wherever necessary to accomplish the purposes of sections 757a to 757f of this title."

16 USC 758a - Exploration, investigation, development, and maintenance of fishing resources and industry of Pacific Ocean; conduct of explorations and related work.

"The Secretary..., is authorized and directed to conduct such fishing explorations and such necessary related work as oceanographical, biological, technological, statistical, and economic studies to insure maximum development and utilization of the high seas fishery resources of the United States and its island possessions in the tropical and subtropical Pacific Ocean..."

16 USC 760a - Atlantic Coast fish study for development and protection of fish resources.

"The Secretary...is directed to undertake a comprehensive and continuing study of species of fish of the Atlantic Coast, including bays, sounds, and tributaries, for the purpose of recommending... measures for the development and protection of such resources and their wisest utilization..."

16 USC 760d - Grants for education and training of personnel in the field of commercial fishing; apportionment; authorization of appropriations; regulations.

"(a) The Secretary...is authorized to make grants, out of funds appropriated for the purposes of this section, to public and non-profit private universities and colleges in the several States and Territories of the United States for such purposes as may be necessary to promote the education and training of professionally trained personnel (including scientists, technicians, and teachers) needed in the field of commercial fishing."

16 USC 760e - Study of migratory game fish; waters; research; purpose.

"The Secretary...is directed to undertake a comprehensive continuing study of the migratory marine fish of interest to recreational fishermen... The study shall include...research on migrations, identity of stocks, growth rates,...for the purpose of developing wise conservation policies and constructive management activities."

16 USC 760f - Authorization to acquire facilities, employ officers and employees, cooperate with State and other agencies, and to publish results.

"...the Secretary is authorized (1) to acquire lands, construct ...buildings,...acquire equipment...employ...officers and employees... (2) ...contract with State and other institutions... (3) make public the results of...research pursuant to section 760e..."

16 USC 760g - Authorization of appropriations.

"There are hereby authorized to be appropriated such sums as may be necessary to carry out the provisions of sections 760e to 760g of this title: Provided, That no more than $2,700,000 be appropriated for this purpose in any one fiscal year."

16 USC 760h - Shellfisheries research center; establishment; purpose.

"The Secretary...is authorized and directed to construct at Milford, Connecticut, a research center for shellfisheries production and for such purpose acquire such real property as may be necessary. Such research center shall consist of research facilities, a pilot hatchery including rearing tanks and ponds, and a training school, and shall be used for the conduct of basic research on the physiology and ecology of commercial shellfish, the development of hatchery methods for cultivation of mollusks, including the development of principles that can be applied to the utilization of artificial and natural salt water ponds for shellfish culture, and to train persons in the most advanced methods of shellfish culture."

16 USC 772d - Enforcement; arrest and seizure; detention; testimony of officers.

"(a) The provisions of the Convention and of sections 772 to 772i of this title...shall be enforced by...the Fish and Wildlife Service..."

The word "Convention" refers to the convention between the U.S. and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea. The enforcement duties of the Fish and Wildlife Service have been transferred to NOAA by Reorganization Plan No. 4 of 1970.

16 USC 777 - Cooperation between Federal government and State fish and game departments; conditions on expenditure of funds.

"The Secretary...is authorized and directed to cooperate with the States through their respective State fish and game departments in fish restoration and management projects as hereinafter set forth:..."

16 USC 778 - Establishment of experiment stations; purpose of research.

"The Secretary...is authorized and directed to establish an experiment station or stations for the purpose of carrying on a program of research and experimentation-

(1) to determine species of fish most suitable for culture on a commercial basis in shallow reservoirs and flooded rice lands;
(2) to determine methods for production of fingerling fishes for stocking in commercial reservoirs;
(3) to develop methods for the control of parasites and diseases of brood fishes and of fingerlings prior to stocking;
(4) to develop economical methods for raising the more desirable species of fishes to a marketable size;
(5) to determine, in cooperation with the Department of Agriculture, the effects of fish-rice rotations, including crops other than rice commonly grown on rice farms, upon both the fish and other crops; and
(6) to develop suitable methods for harvesting the fish crop and preparing it for marketing, including a study of sport fishing as a means of such harvest."

16 USC 779a - Cooperation with States on projects; use of funds; joint projects between States; consent to interstate compacts; reservation of right to alter, amend, or repeal consent.

"The purpose...is to authorize the Secretary...to cooperate with the States...in carrying out projects designed for the research and development of the commercial fisheries resources of the Nation."

16 USC 779d - Plans.

"No moneys appropriated pursuant to this chapter may be obligated ...until the plans...have been...approved by the Secretary.

16 USC 852c - Expenditures; publications; investigations; regulations and their violations.

"The Secretary...is authorized (1) to make such expenditures, including expenditures for personal services at the seat of government and elsewhere, and for cooperation with local, State, and Federal authorities, including the issuance of publications, and necessary investigations, as may be necessary to execute the functions imposed upon him by this chapter and as may be provided for by Congress from time to time; and (2) to make such regulations as he deems necessary to carry out the purposes of this chapter." (in re: Chapter 13 - Regulation of Transportation in Interstate or Foreign Commerce of Black Bass and Other Fish)

16 USC 916j - Administration of enforcement provisions.

"(a) The Secretary...is authorized and directed to administer and enforce all of the provisions of this chapter and regulations issued pursuant thereto and all of the provisions of the convention and of the regulations of the Commission, except to the extent otherwise provided for in this chapter, in the convention, or in the regulations of the Commission." (in re: Chapter 14 - Regulation of Whaling)

The word "convention" refers to the International Convention for the Regulation of Whaling. The word "Commission" refers to the International Whaling Commission.

16 USC 917a - Duties of the Secretary.

"The Secretary of Commerce...shall undertake comprehensive studies of all whales found in waters subject to the jurisdiction of the United States..."

16 USC 917d - Authorization of Appropriations.

"...there is hereby authorized to be appropriated a sum not to exceed $1,000,000 for fiscal years 1978 and 1979."

16 USC 959 - Enforcement of chapter.

(b) Federal law enforcement agents.

"Enforcement of the provisions of this chapter and the regulations issued pursuant thereto shall be the joint responsibility of the United States Coast Guard, the United States Department of Commerce, and the United States Bureau of Customs." (in re: Chapter 16 - Tuna Conventions)

16 USC 986 - Administration and enforcement of chapter.

"(a) The Secretary...is authorized and directed to administer and enforce, ..., all of the provisions of the convention, this chapter, and regulations issued pursuant thereto, except to the extent otherwise provided for in this chapter." (in re: Chapter 17 - Northwest Atlantic Fisheries)

The word "convention" refers to the International Convention for the Northwest Atlantic Fisheries.

16 USC 1027 - Enforcement; boarding and inspecting of vessels; detention of persons and vessels; enforcement officers as witnesses.

"(a) The provisions of the Convention and this chapter relating to abstention from fishing in certain areas by the nationals and vessels of one or more of the contracting parties shall be enforced by the Coast Guard in cooperation with the Fish and Wildlife Service and the Bureau of Customs." (in re: Chapter 19 - North Pacific Fisheries)

The word "Convention" refers to the International Convention for the High Seas Fisheries of the North Pacific Ocean. The functions referred to were transferred from the Fish and Wildlife Service to NOAA by Reorganization Plan No. 4 of 1970.

16 USC 1083 - Enforcement responsibility.

(a) Joint responsibility of Secretaries.
"Enforcement of the provisions of this chapter is the joint responsibility of the Secretary of Commerce, the Secretary of the Treasury, and the Secretary of the Department in which the Coast Guard is operating, and each such Secretary may, by agreement with any other Federal department or agency, utilize the equipment...of that department or agency to carry out such enforcement." (in re: Chapter 21 - Prohibition of Foreign Fishing Vessels in the Territorial Waters of the United States)

16 USC 1100a-1 - Enforcement.

(b) Joint responsibility.
"Enforcement of this chapter and the regulations issued pursuant thereto shall be the joint responsibility of the Secretary of Commerce and the Secretary of the department in which the Coast Guard is operating." (in re: Chapter 21A - Prohibition of Certain Foreign Fishing Vessels in United States Fisheries)

16 USC 1222 - General study and inventory of estuaries and their natural resources.

(a) Estuaries included; considerations; other applicable studies.
"The Secretary of Commerce,..., shall conduct directly or by contract a study and inventory of the Nation's estuaries, including without limitation coastal marshlands, bays, sounds, seaward areas, lagoons, and land and waters of the Great Lakes. For the purpose of this study, the Secretary shall consider, among other matters, (1) their wildlife and recreational potential, their ecology, their value to the marine, anadromous, and shellfisheries and their esthetic value, (2) their importance to navigation, their value for flood, hurricane, and erosion control, their mineral value, and the value of submerged lands underlying the waters of the estuaries, and (3) the value of such areas for more intensive development for economic use as part of urban developments and for commercial and industrial developments."

16 USC 1371 Marine Mammal Protection Act.

"The Secretary ... is authorized and directed ... to waive the requirements of this section so as to allow the taking or importing of any marine mammal product ... "

16 USC 1377 - Enforcement.

(a) Utilization of personnel.
"Except as otherwise provided in this subchapter, the Secretary shall enforce the provisions of this subchapter. The Secretary may utilize, by agreement, the personnel, services, and facilities of any other Federal agency for purposes of enforcing this subchapter." (in re: Chapter 31 - Marine Mammal Protection)

16 USC 1380 - Marine mammal research grants.

"(a) The Secretary is authorized to make grants, or to provide financial assistance in such other form as he deems appropriate, to any Federal or State agency, public or private institution, or other person for the purpose of assisting such agency, institution, or person to undertake research in subjects which are relevant to the protection and conservation of marine mammals...

16 USC 1381 - Commercial fisheries gear development.

(a) Research and development program.

"The Secretary of the department in which the National Oceanic and Atmospheric Administration is operating...is hereby authorized and directed to immediately undertake a program of research and development for the purpose of devising improved fishing methods and gear so as to reduce to the maximum extent practicable the incidental taking of marine mammals in connection with commercial fishing."

16 USC 1384 - Authorization of appropriations.

"(a) There are authorized to be appropriated...$7,223,000 for fiscal year 1982, $8,000,000 for fiscal year 1983, and, $8,800,000 for each of fiscal years 1984, 1985, 1986, 1987 and 1988".

16 USC 1432 - Designation of sanctuaries.

(a) Secretary of Commerce; consultation; proposed designations.

"The Secretary,..., may designate as marine sanctuaries those areas of the ocean waters, as far seaward as the outer edge of the Continental Shelf,..., of other coastal waters where the tide ebbs and flows, or of the Great Lakes and their connecting waters, which he determines necessary for the purpose of preserving or restoring such areas for their conservation, recreational, ecological, or esthetic values."

16 USC 1434 - Authorization of appropriations.

"There are authorized to be appropriated...not to exceed $3,000,000 for FY 1985, $3,300,000 for FY 1986, $3,600,000 for FY 1987, and $3,900,000 for FY 1988"

16 USC 1455 - Administrative grants

(a) "The Secretary may make a grant annually to any coastal state for not more than 80 per centum of the costs of administering such state's management program..."

16 USC 1456a - Coastal energy impact program.

(b) (1) "The Secretary shall make grants annually to coastal states, in accordance with the provisions of this subsection."

16 USC 1461 - Estuarine sanctuaries and Island preservation.

"The Secretary may,... make grants to any coastal state for the purpose of " (1) acquiring, developing, or operating estuarine sanctuaries,..." (2) aquiring lands to provide for the preservation of islands, or portions thereof..."

16 USC 1464 (a) - Authorization of appropriations.

"(a) There are authorized to be appropriated

(1) such sums, not to exceed $48,000,000 for each of the fiscal years occuring during the period beginning October 1, 1980, and ending September 30, 1985 as may be necessary for grants under section 306, to remain available until expended;

(2) such sums, not to exceed $20,000,000 for each of the fiscal years occuring during the period beginning October 1, 1980, and ending September 30, 1985, as may be necessary for grants under section 306A, to remain available until expended;

(3) such sums, not to exceed $75,000,000 for each of the fiscal years occurring during the period beginning October 1, 1980, and ending September 30, 1988, as may be necessary for grants under section 308 (b);

(5) such sums, not to exceed $3,000,000 for each of the fiscal years occuring during the period beginning October 1, 1980 and ending September 30, 1985, as may be necessary for grants under section 309, to remain available until expended;

(7) such sums, not to exceed $9,000,000 for each of the fiscal years occuring during the period beginning October 1, 1980, and ending September 30, 1985, as may be necessary for grants under section 315 to remain available until expended;

(9) such sums, not to exceed $6,000,000 for each of the fiscal years occuring during the period beginning October 1, 1980, and ending September 30, 1985, as may be necessary for administrative expenses incident to the administration of this title."

Authorizing legislation is proposed to extend in 1987 for Sections (7) and (9).

16 USC 1464 (a) - Provides that all grants authorized and appropriated thereunder, except for grants authorized under section 308 (b) in 16 USC 1464 (a) (3) and sums authorized for administrative expenses incident to the administration of this title in 16 USC 1464 (a) (8), are to remain available until expended.

16 USC 1533 - Endangered Species Act.

"The Secretary shall by regulation determine whether any species is an endangered ... or threatened species..."

16 USC 1534 - Land acquisition.

"(a) The Secretary shall establish and implement a program to conserve (A) fish... which are listed as endangered species or threatened species ..."

16 USC 1535 - Authorization of appropriations.

"...there are authorized to be appropriated not to exceed... $6,000,000 for each of fiscal years 1983, 1984, and 1985." This authorization is split between the Department of Commerce and Department of the Interior. Authorizing legislation is proposed to extend in 1987.

16 USC 1542 - Authorization of appropriations.

"Except as provided in Subsections (b), (c), and (d), there are authorized to be appropriated...not to exceed $3,500,000 for each of the fiscal years 1983, 1984, and 1985." Authorizing legislation is proposed to extend in 1987.

16 USC 1811 - Fishery conservation zone.

"There is established a zone contiguous to the territorial sea of the United States to be known as the fishery conservation zone. The inner boundary of the fishery conservation zone is a line conterminous with the seaward boundary of each of the coastal States, and the outer boundary of such zone is a line drawn in such a manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured."

16 USC 1822(a)(4) - Negotiations.

"The Secretary of State shall, upon the request of and in cooperation with the Secretary, initiate and conduct negotiations for the purpose of entering into international fishery agreements..."

16 USC 1852 - Regional fishery management councils:

"There shall be established,...,eight Regional Fishery Management Councils,..."

16 USC 1852 (h).

"Each Council shall.... (1) prepare ... a fishery management plan with respect to each fishery within its geographical area ...; (2) prepare comments on any application for foreign fishing ...; and (3) conduct public hearings ..."

16 USC 1853 - Contents of fishery management plans.

"Any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, shall - ... (2) contain a description of the fishery,..., any recreational interests in the fishery..., (3) assess and specify the present and probable future condition of..., (4) assess and specify - ..., (5) specify the pertinent data..."

16 USC 1854(e) - Fisheries research.

"The Secretary shall initiate and maintain a comprehensive program of fishery research to carry out and further the purposes, policy, and provisions of this Act. Such program shall be designed to acquire knowledge and information, including statistics, on fishery conservation and management,..."

16 USC 1855 - Staff and administration.

"The Secretary shall provide to each Council such administrative and technical support services as are necessary for the effective functioning of such Council."

16 USC 1861 - Enforcement.

"(a) The provisions of this Act shall be enforced by the Secretary and the Secretary of the department in which the Coast Guard is operating."

"(b) Any officer who is authorized...to enforce the provisions of this Act may...(A) arrest any person, if he has reason to believe that such person has committed an act prohibited...; (B) board, and search or inspect, any fishing vessel which is subject to the provisions of this Act; (C) seize any fishing vessel...used or employed in, the violation of any provisions of this Act; (D) seize any fish...taken or retained in violation of any provisions of this Act; and (E) seize any other evidence related to any violation..."

16 USC 1882 - Authorization of appropriations.

"There are authorized to be appropriated to the Secretary, for purposes of carrying out the provisions of this Act, not to exceed the following sums: ... $59,000,000 for the fiscal year ending September 30, 1983; $64,000,000 for the fiscal year ending September 30, 1984; and $69,000,000 for the fiscal year ending September 30, 1985." This authorization applies to 16 USC 1811-1861. Authorizing legislation is proposed to extend this authorization through fiscal 1987.

16 USC 3633(c) - Authority and Responsibility.

"...the Secretary shall prepare, as appropriate, all statements, reports, and information required by the Treaty..."

16 USC 3636 - Rulemaking.

"(a) the Secretary,... shall promulgate such regulations as may be necessary to carry out the United States international obligations under the Treaty..."

"(b) the Secretary,... may promulgate regulations applicable to nationals or vessels of the United States..." The word "Treaty" refers to the "Pacific Salmon Treaty Act of 1985"

16 USC 3641 - Authorization of Appropriations.

"There are authorized to be appropriated from time to time such sums as may be necessary for carrying out the purposes and provisions of the Treaty..."

30 USC 1412 - Licenses for exploration and permits for commercial recovery.

"...the Administrator shall issue to applicants who are eligible therefor licenses for exploration and permits for commercial recovery." The word "Administrator" refers to the Administrator of NOAA.

30 USC 1419 - Protection of the environment.

"The Administrator shall expand and accelerate the program assessing the effects on the environment from exploration and commercial recovery activities..." "The Administrator also shall conduct a continuing program of ocean research to support environmental assessment activity through the period of exploration and recovery..."

30 USC 1424 - Federal observers.

"Each license and permit issued shall require the licensee or permittee-

(1) to allow the Administrator to place observers aboard vessels used by the licensee or permittee in exploration or commercial recovery activities (A) to monitor such activities, and (B) to report to the administrator a failure to comply with such terms, conditions, and restrictions;

(2) to cooperate in the performance of monitoring functions; and

(3) to monitor the environmental effects of the exploration and commercial recovery activities...and to submit such information as ... necessary and appropriate to assess environmental impacts and to develop and evaluate possible methods of mitigating adverse environmental effects."

30 USC 1428 Reciprocating States.

"(a) DESIGNATION. - The Administrator, in consultation with the Secretary of State and the heads of other appropriate departments and agencies, may designate any foreign nation as a reciprocating state..."

30 USC 1469 Biennial Report.

"(a) SUBMISSION OF REPORTS. - The Administrator shall submit to the Congress-

(1) ... a report on the administration of this Act during the period beginning on the date of enactment of this Act and ending September 30, 1981; and

(2) not later than December 31 of each second year thereafter, a report on the administration of this Act during the two fiscal years preceding the date on which the report is required to be filed.

(b) CONTENTS. - Each report filed pursuant to subsection (a) shall include, but not be limited to ...

(1) Licenses and permits issued, modified, revisid, suspended, revoked, relinquished, surrendered, or transferred; denials of licenses and permits; denials of issuance or transfer of licenses and permits; and required suspensions and modifications of activities under licenses and permits.

(2) A description and evaluation of the exploration and commercial recovery activities undertaken, including, but not limited to, information setting forth the quantities of hard mineral resources recovered and the disposition of such resources.

(3) An assessment of the environmental impacts, including description and estimate of any damage caused by any adverse effects on the quality of the environment resulting from such activities.

(4) The number and description of all civil and criminal proceedings, including citations, instituted under this title, and the current status of such proceedings.

(5) Such recommendations as the Administrator deems appropriate for amending this Act to further fulfill its purposes."

30 USC 1470 - Authorization of Appropriations.

"There are authorized to be appropriated to the Administrator, for purposes of carrying out the provisions of titles I and II and this title, $1,500,000 for the fiscal years ending September 30, 1985, and September 30, 1986".

33 USC 706 - Department of Commerce; current information; appropriation.

"There is authorized an expenditure as required,..., for the establishment, operation, and maintenance by the Department of Commerce of a network of recording and non-recording precipitation stations, known as the Hydroclimatic Network, whenever...such service is advisable..."

33 USC 853a-876 - NOAA Corps.

These statutory provisions authorize the numerous functions inherent in and necessary for the maintenance of the commissioned officer corps of the National Oceanic and Atmospheric Administration. Included in these provisions are authorities pertaining to the authorized numbers in the respective permanent ranks; appointment and promotion of officers; retirement and separation of officers; cooperation with the transfer of officers to military departments; servicemen's and veterans' benefits; and rights, privileges, immunities and benefits of members of the commissioned corps.

33 USC 883a - Surveys and other activities.

"...the Secretary...is authorized to conduct the following activities:
(1) Hydrographic and topographic surveys;
(2) Tide and current observations;
(3) Geodetic-control surveys;
(4) Field surveys for aeronautical charts;
(5) Geomagnetic, seismological, gravity, and related geophysical measurements and investigations."

33 USC 883b - Dissemination of data; further activities.

"...the Secretary is authorized to conduct the following activities:
- (1) Analysis and prediction of tide and current data;
- (2) Processing and publication of data...;
- (3) Compilation and printing of aeronautical charts...;
- (4) Compilation and printing of nautical charts...;
- (5) Distribution of aeronautical charts...;
- (6) Distribution of nautical charts..."

33 USC 883c - Geomagnetic data; collection; correlation, and dissemination.

"To provide for the orderly collection of geomagnetic data...the Secretary is authorized to collect, correlate, and disseminate such data."

33 USC 883d - Improvement of methods, instruments, and equipments; investigations and research.

"...the Secretary is authorized to conduct developmental work for the improvement of surveying and cartographic methods, instruments, and equipments; and to conduct investigations and research in geophysical sciences..."

33 USC 883f - Contracts with qualified organizations.

"The Secretary is authorized to contract with qualified organizations for the performance of any part of the authorized functions of the Coast and Geodetic Survey..."

33 USC 883h - Employment of public vessels.

"The President is authorized to cause to be employed such of the public vessels as he deems it expedient to employ, and to give such instructions for regulating their conduct as he deems proper in order to carry out the provisions of sections 833a to 883i of this title."

33 USC 883i - Authorization of appropriations.

"There are authorized to be appropriated such funds as may be necessary to acquire, construct, maintain, and operate ships, stations, equipment, and facilities and for such other expenditures, including personal services at the seat of government and elsewhere and including the erection of temporary observatory buildings and lease of sites therefore as may be necessary..."

33 USC 1441 - Monitoring and research program; reports to Congress.

"The Secretary of Commerce, in coordination with the Secretary of the Department in which the Coast Guard is operating and with the Administrator shall, within six months of October 23, 1972, initiate a comprehensive and continuing program of monitoring and research regarding the effects of the dumping of material into ocean waters or other coastal waters where the tide ebbs and flows or into the Great Lakes or their connecting waters and shall report from time to time,..., his findings...to the Congress."

33 USC 1442 - Research program respecting possible long-range effects of pollution, overfishing, and man-induced changes of ocean ecosystems.

(a) Secretary of Commerce.

"The Secretary...,...shall,..., initiate a comprehensive and continuing program of research with respect to the possible long-range effects of pollution, overfishing, and man-induced changes of ocean ecosystems."

33 USC 1443 - Cooperation with public authorities, agencies, and institutions, private agencies and institutions, and individuals.

"The Secretary...shall conduct and encourage, cooperate with, and render financial and other assistance to appropriate public... authorities, agencies, and institutions, private agencies and institutions, and individuals in the conduct of, and to promote the coordination of, research, investigations, experiments, training, demonstrations, surveys, and studies for the purpose of determining means of minimizing or ending all dumping of materials within five years of the effective date of this Act."

33 USC 1444 - Authorization of appropriations.

"There are authorized to be appropriated...not to exceed $6,500,000 for fiscal year 1978, not to exceed $11,395,000 for fiscal year 1981, and not to exceed $12,000,000 for fiscal year 1982." Authorizing legislation is proposed to extend this authorization through fiscal 1987.

33 USC 1703 - Comprehensive Federal Plan Relating to Ocean Pollution.

"The Administrator...shall prepare...a comprehensive 5-year plan...for the overall Federal effort in ocean pollution research and development and monitoring. The plan shall be...submitted to Congress and the President on or before February 15, 1979 and a revision... shall be...submitted by February 15 of each odd-numbered year occurring after 1979."

33 USC 1704 - Comprehensive Ocean Pollution Program in the Administration.

"The Administrator shall establish within the Administration a comprehensive, coordinated and effective ocean pollution research and development and monitoring program."

33 USC 1705 - Grants and contracts.

"The Administrator may provide financial assistance...of grants or contracts for research and development and monitoring projects or activities...to meet priorities set forth in the Plan..."

33 USC 1709 - Authorization of Appropriations.

"There are authorized to be appropriated to the Administration for the purposes of carrying out this Act not to exceed $4,300,000 for the fiscal year ending September 30, 1980, $3,000,000 for the fiscal year ending September 30, 1981, and $4,000,000 for the fiscal year ending September 30, 1982." Authorizing legislation is proposed to extend this authorization through fiscal 1987.

37 USC 101 et seq. - Pay and Allowances for Members of the Uniformed Services.

Authorizes pay and allowances for members of the NOAA Commissioned Officers Corps.

42 USC 1891 - Authorization to make grants.

"The head of each agency of the Federal Government, authorized to enter into contracts for basic scientific research at nonprofit institutions of higher education, or at nonprofit organizations whose primary purpose is the conduct of scientific research, is authorized, where it is deemed to be in furtherance of the objectives of the agency, to make grants...for the support of such...research."

42 USC 7453 - The Clean Air Act.

"(f) (2) Members of the Coordinating Committee shall include the appropriate official responsible for the relevant research efforts of ...
(A) The National Oceanic and Atmospheric Administration ...
(f) (3) The Coordinating Committee shall review and comment on plans for, and the execution and results of, pertinent research and studies..."

42 USC 7454 - The Clean Air Act.

"(a) The Administrator of the National Oceanic and Atmospheric Administration shall establish a continuing program of research and monitoring of the stratosphere for the purposes of early detection of changes in the stratospheric and climatic effects of such changes..."

42 USC 8902 - Interagency Task Force; Comprehensive Program.

"(a) There is hereby established a comprehensive ten-year program to carry out the provisions of this subtitle; and to implement this program there shall be formed an Acid Precipitation Task Force (hereafter in this subtitle referred to as the "Task Force"), of which the Secretary of Agriculture, the Administrator of the Environmental Protection Agency, and the Administrator of the National Oceanic and Atmospheric Administration shall be joint chairmen."

"(c) The Administrator of the National Oceanic and Atmospheric Administration shall serve as the director of the research program established by this subtitle."

42 USC 8903 - Comprehensive Research Plan.

"(a) The Task Force shall prepare a comprehensive research plan for the ten-year program (hereafter in this subtitle referred to as the "comprehensive plan"), setting forth a coordinated program (1) to identify the causes and effects of acid precipitation and (2) to identify actions to limit or ameliorate the harmful effects of acid precipitation."

"(c) The comprehensive plan--

(1) shall be submitted in draft form to the Congress, and for public review, within six months after the date of the enactment of this Act;

(2) shall be available for public comment for a period of sixty days after its submission in draft form under paragraph (1);

(3) shall be submitted in final form, incorporating such needed revisions as arise from comments received during the review period, to the President and the Congress within forty-five days after the close of the period allowed for comments on the draft comprehensive plan under paragraph (2); and

(4) shall constitute the basis on which requests for authorizations and appropriations are to be made for the nine fiscal years following the fiscal year in which the comprehensive plan us submitted in final form under paragraph (3)."

42 USC 8904 - Implementation of the Comprehensive Plan.

"(a) The comprehensive plan shall be carried out during the nine fiscal years following the fiscal year in which the comprehensive plan is submitted in its final form under section 704(c)(3); and..."

42 USC 8905 - Authorization of Appropriations.

"(a) For the purpose of establishing the Task Force and developing the comprehensive plan under section 704 there is authorized to be appropriated to the National Oceanic and Atmospheric Administration for fiscal year 1981 the sum of $5,000,000, to remain available until expended.

(b) Authorizations of appropropriations for the nine fiscal years following the fiscal year in which the comprehensive plan is submitted in final form under section 704(c)(3), for purposes of carrying out the comprehensive ten-year program established by section 703(a) and implementing the comprehensive plan under sections 704 and 705, shall be provided on an annual basis in authorization Acts hereafter enacted; but the total sum of dollars authorized for such purposes for such nine fiscal years shall not exceed $45,000,000 except as may be specifically provided by reference to this paragraph in the authorization Acts involved."

43 USC 1347(e) - Safety Regulations.

"The Secretary... shall conduct studies of underwater diving techniques and equipment suitable for protection of human safety and improvement of diver performance. Such studies shall include, but need not be limited to, decompression and excursion table development and improvement and all aspects of diver physiological restraints and protective gear for exposure to hostile environments."

49 App USC 1153 - Training of foreign nationals in aeronautical and related subjects.

"Subject to the concurrence of the Secretary of State, the Secretary of Transportation, and the Secretary of Commerce, within their respective fields, are authorized within or outside the United States to train foreign nationals directly, or in conjunction with any other United States Government agency, or through any United States public or private agency..., or through any international organization, in aeronautical and related subjects essential to the orderly and safe operation of civil aircraft."

2. including acquisition of aircraft;

31 USC 638a (b) - "... no appropriation shall be available for the purchase, maintenance or operation of any aircraft unless specific authority for the purchase, maintenance, or operation thereof has been or is provided in such appropriation."

3. maintenance, operation, and hire of aircraft;

no specific authority

31 USC 638a - Restrictions on purchase, operation, use and maintenance of passenger motor vehicles and aircraft, Subsection (b) Aircraft, provides that: "...no appropriations shall be available for the purchase, maintenance, or operation of any aircraft unless specific authority for the purchase, maintenance or operation thereof has been or is provided in such appropriation."

4. 399 commissioned officers on the active list;

no specific authority

33 USC 851 provided for 250 commissioned officers prior to the consolidation of the Coast and Geodetic Survey and Weather Bureau into a single agency in the Department of Commerce. Subsequent to the consolidation, a general authorization has appeared in the appropriation acts for the agency. This appropriation language will provide the legal authority for the authorized strength on active duty.

5. construction of facilities, including initial equipment;

33 USC 883i - "There are authorized to be appropriated such funds as may be necessary to acquire, construct, maintain and operate ships, stations, equipment, and facilities and for such other expenditures, including personal services at the seat of government and elsewhere and including the erection of temporary observatory buildings and lease of sites therefore as may be necessary..."

6. alteration, modernization, and relocation of facilities;

33 USC 883i

Citation text in Item 5.

7. and acquisition of land for facilities;

no specific authority

41 USC 14 - Restriction on purchases of land, provides that: "No land should be purchased on account of the United States, except under a law authorizing such purchase."

8. $836,479,000, to remain available until expended:

no specific authority

31 USC 718 - Appropriations in annual appropriation Acts not permanent, states: "No specific or indefinite appropriation...shall be construed to be permanent or available continuously...unless it is made in terms expressly providing that it shall continue available beyond the fiscal year for which the appropriation Act in which it is contained makes provision."

9. and in addition, $1,800,000 shall be derived by transfer from the Fisheries Loan Fund;

10. and, in addition, $77,500,000 shall be derived by transfer from the Airport and Airways Trust Fund; and, in addition, $46,000,000 shall be derived by transfer from the Fund entitled "Promote and develop fishery products and research pertaining to American Fisheries"; and, in addition, $8,300,000 shall be derived by transfer from the Coastal Energy Impact Fund.

Summary of Resource Requirements
(dollar amounts in thousands)

Appropriation: Operations, research, and facilities

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			11,012 (11,629)	$1,136,699
NOAA-33	Adjustments to base and built-in changes:				
	Transfers:				
	Enacted	... (...)	+$43,700		
	Proposed	+1 (+1)	...		
	Proposed rescissions for 1986	... (...)	-66,604		
	Other increases	... (...)	+11,743		
	Other decreases	-1,013 (-991)	-37,877		
	Subtotal, adjustments to base and built-in changes			-1,012 (-990)	-49,038
	1987 Base			10,000 (10,639)	1,087,661

Page No.	Comparison by activities:	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-) Over 1987 Base	
		Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Ocean and coastal programs:										
NOAA-39	Non-living marine resources	30 (31)	$4,063 (3,996)	13 (14)	$1,525 (1,648)	13 (14)	$1,589 (1,589)	13 (14)	$1,589 (1,589)	... (...)	...
NOAA-41	Ocean research	278 (289)	30,123 (30,873)	268 (281)	36,688 (36,688)	249 (264)	37,237 (37,237)	242 (257)	21,958 (21,958)	-7 (-7)	-$15,279
NOAA-47	Ocean services	367 (380)	33,648 (30,673)	300 (320)	30,090 (33,850)	289 (310)	30,311 (30,402)	256 (280)	21,411 (21,502)	-33 (-30)	-8,900
NOAA-52	Sea Grant	32 (33)	39,020 (38,539)	28 (27)	40,250 (40,250)	28 (27)	9,646 (9,646)	... (...)	... (...)	-28 (-27)	-9,646
NOAA-55	Coastal zone management	81 (84)	45,826 (52,114)	78 (82)	43,954 (49,139)	77 (81)	8,025 (8,025)	71 (75)	5,875 (5,875)	-6 (-6)	-2,150
NOAA-59	Mapping, charting, and geodesy programs.	741 (770)	48,945 (50,374)	709 (751)	46,095 (46,501)	535 (577)	45,098 (45,098)	535 (577)	41,580 (41,580)	... (...)	-3,518
	Subtotal	1,529 (1,587)	201,625 (206,569)	1,396 (1,475)	198,602 (208,076)	1,191 (1,273)	131,906 (131,997)	1,117 (1,203)	92,413 (92,504)	-74 (-70)	-39,493

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

	Comparison by activities:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Over 1987 Base Perm. Pos.	Inc.(+) or Dec.(-) Over 1987 Base Amount
	Marine fishery resource programs:										
NOAA-66	Information collection and analyses.....	1,279	$82,433	1,329	$95,027	1,238	$96,158	1,079	$65,425	-159	-$30,733
		(1,332)	(82,044)	(1,400)	(95,897)	(1,314)	(96,258)	(1,172)	(65,525)	(-142)	
NOAA-76	Conservation and management operations..	480	47,003	499	43,224	491	43,573	478	28,300	-13	-15,273
		(501)	(49,642)	(529)	(44,569)	(521)	(43,607)	(509)	(28,334)	(-12)	
NOAA-82	State and industry assistance programs..	224	21,924	248	23,858	223	18,857	69	2,964	-154	-15,893
		(234)	(21,354)	(270)	(25,529)	(249)	(18,857)	(99)	(2,964)	(-150)	
	Subtotal..............................	1,983	151,360	2,076	162,109	1,952	158,588	1,626	96,689	-326	-61,899
		(2,067)	(153,040)	(2,199)	(165,995)	(2,084)	(158,722)	(1,780)	(96,823)	(-304)	
	Atmospheric programs:										
NOAA-89	Public warning and forecast services....	3,817	296,327	3,754	290,237	3,476	273,394	3,351	274,485	-125	+1,091
		(3,980)	(297,474)	(3,974)	(293,266)	(3,702)	(273,440)	(3,587)	(274,531)	(-115)	
NOAA-102	Atmospheric and hydrological research...	603	65,221	645	67,137	625	66,744	631	60,304	+6	-6,440
		(629)	(64,940)	(679)	(67,187)	(659)	(66,769)	(666)	(60,329)	(+7)	
	Subtotal..............................	4,420	361,548	4,399	357,374	4,101	340,138	3,982	334,789	-119	-5,349
		(4,609)	(362,414)	(4,653)	(360,453)	(4,361)	(340,209)	(4,253)	(334,860)	(-108)	
	Satellite and environmental data and information services:										
NOAA-111	Satellite services......................	593	209,612	544	72,418	431	70,231	432	72,606	+1	+2,375
		(617)	(199,768)	(574)	(82,794)	(461)	(70,284)	(462)	(72,659)	(+1)	
NOAA-116	Satellite systems.......................	...	202,765	...	240,129	...	240,129	...	168,139	...	-71,990
		(...)	(202,238)	(...)	(240,609)	(...)	(240,129)	(...)	(168,139)	(...)	
NOAA-124	Data and information services...........	454	24,536	460	23,119	408	22,734	408	22,734	...	...
		(473)	(24,882)	(488)	(23,385)	(436)	(22,734)	(436)	(22,734)	(...)	
	Subtotal..............................	1,047	436,913	1,004	335,666	839	333,094	840	263,479	+1	-69,615
		(1,090)	(426,888)	(1,062)	(346,788)	(897)	(333,147)	(898)	(263,532)	(+1)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

	Comparison by activities:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Over 1987 Base Perm. Pos.	Inc.(+) or Dec.(-) Over 1987 Base Amount
	Program support:										
NOAA-127	Executive direction and administration........................	1,239	$52,676	1,213	$52,129	1,171	$52,504	1,163	$53,004	-8	+$500
		(1,289)	(51,280)	(1,282)	(55,072)	(1,240)	(52,507)	(1,228)	(53,007)	(-12)	
NOAA-130	Marine services........................	971	61,262	835	58,714	675	57,537	516	47,511	-159	-10,026
		(996)	(61,960)	(866)	(58,757)	(710)	(57,537)	(557)	(47,511)	(-153)	
NOAA-136	Aircraft services........................	84	13,842	89	15,805	71	13,894	71	14,694	...	+800
		(86)	(13,714)	(92)	(16,017)	(74)	(13,894)	(74)	(14,694)	(...)	
	Subtotal........................	2,294	127,780	2,137	126,648	1,917	123,935	1,750	115,209	-167	-8,726
		(2,371)	(126,954)	(2,240)	(129,846)	(2,024)	(123,938)	(1,859)	(115,212)	(-165)	
	Total requirements........................	11,273	1,279,226	11,012	1,180,399	10,000	1,087,661	9,315	902,579	-685	-185,082
		(11,724)	(1,275,865)	(11,629)	(1,211,158)	(10,639)	(1,088,013)	(9,993)	(902,931)	(-646)	
	Financing:										
	Ocean and Coastal programs funded from Coastal energy impact fund............				-8,000				-8,300		
	Fisheries Loan Fund....................				...				-1,800		
	Deobligations........................				...				-10,000		
	Budget authority........................				1,172,399				882,479		
	Financing from proposed transfers:										
	From "Promote and develop fishery products and research pertaining to American fisheries"..................				-35,700				-46,000		
	Appropriation (general fund)..............				1,136,699				836,479		

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Justification of Adjustments to Base and Built-in Changes
(dollar amounts in thousands)

Appropriation: Operations, Research, and Facilities

Financing approved for 1986

Transfers:

	Perm. Pos.	Amount
Enacted:		
"Promote and develop fishery products and research pertaining to American fisheries"	...	+$35,700

This amount was transferred in FY 1986 as a partial offset to the direct appropriation requirements of the "Operations, research, and facilities" account.

	Perm. Pos.	Amount
"Coastal energy impact fund"	...	+8,000

This amount from loan principal and interest payments in the "Coastal energy impact fund" was transferred in FY 1986 as a partial offset to the direct appropriation requirements for Ocean and coastal programs of the "Operations, research, and facilities" account.

	Perm. Pos.	Amount
Proposed:		
From "Construction"	+1 (+1)	...

The "Construction" account is not required in FY 1987. The transfer of one detailed position back to the Western Administrative Support Center in the "Operations, research and facilities" account is requested.

	Perm. Pos.	Amount
From the State and industry subactivity	...	...

		Amount
From Subactivity:	State and industry assistance programs Grants to states	-$1,818
To Subactivity:	Information, collection, and analyses Resource information	+1,818

The funds transferred from the Grants to State line item to the Resource Information line item are associated with the anadromous fisheries grant program for Alaska and the west coast states. The transfer supports the Pacific Salmon Treaty Program under the U.S./Canada Pacific Salmon Treaty.

	Perm. Pos.	Amount
From the Information, collection, and analyses subactivity	...	...

	Amount
From Subactivity: Information, collection, and analyses Resource information	-$600
To Subactivity: Ocean research Ocean and Great Lakes prediction research	+600

In FY 1986, Congress provided $600,000 to conduct the second phase of a study of the subarctic ecosystem to be conducted jointly by the Oceanic Institute of Hawaii and the University of Alaska's School of Fisheries Science. These funds are shown in the Resource Information line item for FY 1986. To offset the cost of this project, Congress only provided $2,400,000 of the $3,000,000 requested for the Fisheries-Oceanography Coordinated Investigations (FOCI) program in the Ocean and Great Lakes Prediction Research line item. The FY 1987 base for the Resource Information line item has been reduced by $600,000 to reflect the one-time costs of the subarctic research in FY 1986 and the Ocean and Great Lakes Prediction Research line item has been increased by $600,000 to reflect the original program level requested for the FOCI program.

	Perm. Pos.	Amount
Proposed FY 1986 program rescissions	...	-$66,604

Rescissions of unobligated balances will be proposed for the following programs in FY 1986.

	Amount
Sea Grant (p. NOAA-53)	-$30,604
Coastal Zone Management - State Assistance Grants (p. NOAA-58)	-36,000

	Perm. Pos.	Amount
Other increases		
Pay cost restoration	...	+2,887
Satellite research restoration	...	+250
Deficit reduction act restoration	...	+4,546
Personnel compensation	...	+153
Personnel benefits	...	+783
Benefits of former personnel	...	+387
Rent, communications, and utilities	...	+1,812
Contractual services	...	+925
Total, other increases	...	+11,743
Pay cost restoration	...	+2,887

In 1986, Congress restored 4 of the 5 percent pay reduction initially requested in the 1986 budget by the President. The adjustment requested in 1987 is the additional 1 percent including the effects of the government-wide pay increase approved for FY 1985.

	Perm. Pos.	Amount
Satellite research restoration	...	+$250

In FY 1986, Congress directed NOAA to redirect $750,000 from the Satellite Research program to the Marine Mammals Research program. This adjustment restores $250,000 to the Satellite Research program.

	Perm. Pos.	Amount
Deficit reduction act restoration	...	+4,546

A restoration of $4,546,000 is requested associated with Section 2901 of the Deficit Reduction Act of 1984 (P.L. 98-369). Details of the increase are as follows:

	Amount
Travel	+$2,554
Motor vehicles	+328
Publications	+740
Consultants	+406
Public Affairs	+518

		Perm. Pos.	Amount
Personnel compensation		...	+153
Within-grade step increase (civilian)	...		
Commissioned officers' longevity	...		
Variable housing allowance	$124		
Rent plus housing allowance	29		

An adjustment of $1,794,152 is required for within-grade step increases for FY 1985. The calculation follows:

Estimated number of within-grade step increases scheduled	5,119	
Step increases not earned due to turnover	614	
Estimated average step above base of grade per separation	4.6	
Average cost per within-grade step increase	$718	
Gross cost of scheduled step increases (5,119 x $718)		$3,675,442
Less: Savings due to separations (614 x 4.6 x $718)		-2,027,919
Subtotal, personnel compensation		1,647,523
Personnel benefits (retirement, group life insurance, medicare: 8.9% of $1,647,523)		146,629
Total cost, NOAA within-grade step increase		1,794,152
Amount absorbed		1,794,152

Under the provisions of 37 USC 203, NOAA Corps' commissioned officers are granted longevity increases similar to civilian within-grade step increases. The longevity increases are based on the officers' ranks and total years of creditable service. In FY 1985, commissioned officers will receive longevity increases in the aggregate amount of $122,348. The calculation follows:

Estimated number of longevity increases scheduled	166	
Estimated number of longevity increases not earned due to separations	15	
Average cost of longevity increase	$762	
Average cost saving per separation	-1,058	
Gross cost of scheduled longevity increases ($762 x 166)		$126,492
Less: Savings due to separations ($1,058 x 15)		-15,870
Subtotal		110,622
Personnel benefits (10.6% of $110,622)		11,726
Total, commissioned officers' longevity increase		122,348
Amount absorbed		122,348

The Military Personnel and Compensation Amendment Act of 1980 (P.L. 96-343, dated September 8, 1980) authorized a "Variable Housing Allowance" for members of the uniformed services to defray high housing costs. Under the monthly rates effective January 1, 1985, the cost for this allowance has increased $124,376 over a base of $614,760.

Revisions to the Joint Travel Regulations for commissioned personnel now authorize payments of a housing allowance in selected areas outside the continental United States. Effective September 1, 1984, this new entitlement is payable in addition to cost-of-living allowances and requires an adjustment of $29,416.

	Perm. Pos.	Amount
Personnel benefits	...	+$783

Cost-of-living allowance	$145
Federal Insurance Contribution Act	564
Employees' Compensation Fund	74

The Office of Personnel Management has jurisdiction over the establishment of cost-of-living allowances (COLA) for employees stationed in selected high-cost areas. Although the FY 1985 rates have not changed, COLA payments increased when the FY 1985 pay raise increased the basic rate of pay. As a result, adjusted COLA rates affected 613 NOAA employees and resulted in an increased requirement of $144,759.

Effective January 1985, the Federal government's contribution to the Federal Insurance Contribution Act (FICA) increased from 7.00 percent of the first $37,800 of each applicable employee's wages to 7.05 percent of the first $39,600. This change results in an increase to NOAA of $28,669. In addition, NOAA is subject to FICA withholdings of $479,137 for "newly hired" Federal employees. These changes will result in an increase of $507,806.

Effective January 1986, the Federal government's contribution to FICA increases from 7.05 percent of the first $39,600 of each applicable employee's wages to 7.15 percent of the first $41,700. This change results in an increase to NOAA of $47,819.

Effective January 1987, the Federal government's contribution to FICA will increase from 7.15 percent of the first $41,700 of each applicable employee's wages to 7.15 percent of the first $43,200. This change will result in an increase to NOAA of $8,687.

The Department of Labor billing for repayment to the Employees' Compensation Fund will increase by $74,000 in FY 1985, over the FY 1984 base of $2,577,583.

	Perm. Pos.	Amount
Benefits for former personnel	...	+$387

The Retired Pay account of the NOAA Corps requires an adjustment of $386,891 on a base of $4,382,976. Retirement benefits increased 3.5 percent on December 1, 1984, in accordance with P.L. 97-253.

Rent, communications, and utilities.	...	+1,812

An increase of $1,812,000 over the FY 1986 base of $21,250,000 will be needed in FY 1987 for rent payments to GSA (SLUC).

Contractual services		...	+925
Cross service agreements	$193		
Working capital fund	732		

Cross service agreements between NOAA and the Air Force have increased $193,000. The adjustment, to a base of $8,472,900 for hurricane reconnaissance support is a result of the Air Force announced increase for operations and maintenance of the WC-130 aircraft for FY 1986. The aircraft is under the direction of the 920th Weather Reconnaissance Group which is responsible for the maintenance of on-board meteorological instrumentation, depot operations, and aircrew proficiency and training.

An adjustment of $732,000 is required over the FY 1986 base of $7,822,000 for services provided by the Office of the Secretary through the Department's Working Capital Fund.

Other Decreases		
Non-recurring programs	...	-9,985
Administrative cost savings	-260	-7,875
Productivity improvement program	-728	-7,151
Next Generation Weather Radar program funding	-25	-12,866
Total, other decreases	-1,013	-37,877
Non-recurring programs	...	-9,985

The Congressional add-on of $3,000,000 associated with the Integrated Flood Observing and Warning System is not required in FY 1987. The FY 1986 funding is sufficient to provide flood warning services in high-risk areas. Under this program, states and localities fund operation and maintenance of the systems, so NOAA does not require recurring funds.

NOAA received an FY 1981 increase of $750,000 to improve forecasting techniques used to predict storm surges. Of this amount, $485,000 will non-recur in FY 1987.

The FY 1986 add-on of $3,000,000 associated with the gulf oyster bed will non-recur in FY 1987.

A decrease of $1,500,000 from the VISSR Atmospheric Sounder (VAS) assessment program will non-recur in FY 1987. Remaining funds will continue the maintenance and operation of the VAS capability onboard the current GOES satellites.

The Congressional add-on of $2,000,000 is not required in 1987. This add-on reflects a one time cost for the purchase of a Bell Twin Engine Helicopter.

	Perm. Pos.	Amount
Administrative cost savings..	-260 (-238)	-$7,875

A decrease of 168 positions and $2,702,000 is proposed as program administrative savings. This reduction includes a decrease of 143 positions and $1,852,000 associated with the program decreases of $243,146,000 proposed in the FY 1987 budget, and savings of 25 positions and $850,000 that will be achieved through improvements in management of administrative functions.

A decrease of 88 positions and $4,973,000 is proposed as management savings. These savings include a goal of reducing the cost of positions in grades 11-15 by $3,073,000. These savings may be achieved by improved overall position management or through other administrative cost reductions. Also, an agency-wide review is being conducted of NOAA's field structure to streamline administrative functions which duplicate services provided by the Regional Administrative Support Centers and headquarters staff. Included in the management savings amount are reductions of 60 positions and $1,100,000 restored in FY 1985, plus 28 positions and $800,000 for FY 1986.

A decrease of four positions and $200,000 is proposed as part of a NOAA-wide review of printing facilities.

	Perm. Pos.	Amount
Productivity improvement program..	-728 (-728)	-7,151

As part of the government-wide Productivity Improvement Program under OMB Circular A-76, NOAA has developed an inventory of programs to be reviewed. These productivity improvement reviews represent an opportunity to identify the most cost effective method for conducting operations in all five of NOAA's program areas, through continued in-house operations, contracting, or by other Federal agencies. Consistent with the inventory of programs to be reviewed, NOAA proposes a reduction of 728 positions and $7,151,000 as a result of its A-76 program.

	Perm. Pos.	Amount
Next Generation Weather Radar (NEXRAD) program funding..	-25 (-25)	-12,866

Beginning in FY 1987, the NEXRAD program will be financed with funding derived from the Federal Aviation Administration (FAA) Airport and Airway Trust Fund. Base funding of $12,866,000 will be eliminated from NOAA's "Operations, research, and facilities" account since total program funding of $47,500,000 will come from the FAA Trust Fund. The 25 positions associated with the NEXRAD program will remain as reimbursable positions within the Operations, research, and facilities account.

Justification of Program and Performance

Activity: Ocean and coastal programs
Subactivity: Non-living marine resources

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ocean minerals	9 (9)	$1,583 (1,511)	13 (14)	$1,525 (1,648)	13 (14)	$1,589 (1,589)	13 (14)	$1,589 (1,589)	... (...)	...
Ocean energy	7 (7)	480 (485)	... (...)	... (...)	... (...)	... (...)	... (...)	... (...)	... (...)	...
Ocean minerals resource evaluation	14 (15)	2,000 (2,000)	... (...)	... (...)	... (...)	... (...)	... (...)	... (...)	... (...)	...
Total requirements	30 (31)	4,063 (3,996)	13 (14)	1,525 (1,648)	13 (14)	1,589 (1,589)	13 (14)	1,589 (1,589)	... (...)	...

Note: Permanent position amounts in parenthesis represent workyears, and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To facilitate the orderly and environmentally sound development and commercialization of deep seabed hard mineral resources and related technology through the implementation of an effective legal framework and to study the basic physical and biological processes active at centers of seafloor spreading.

Objectives: To administer the programs required by the Deep Seabed Hard Mineral Resources Act (P.L. 96-283) which are designed to: regulate and encourage the mining of manganese nodules from the floor of the deep ocean by United States companies in coordination with the development of a reasonable international arrangement; to ensure that the development of manganese nodule resources of the deep seabed is carried out in an orderly manner that will protect the quality of the environment; and to assist in the development of United States policies dealing with foreign participation and cooperation in manganese nodule mining and related activities.

Base Program

Minerals are essential to the well-being of an industrial economy. Manganese nodules and other hard minerals of the deep seabed, if commercially developed by the private sector, would reduce dependence on potentially unstable foreign supplies of strategic minerals, improve the balance of payments, provide significant new employment opportunities in the private sector, and help maintain leadership in ocean technologies.

Ocean minerals -- Under provisions of the Deep Seabed Hard Mineral Resources Act (P.L. 96-283), NOAA is empowered to issue licenses and permits for the exploration and commercial recovery, respectively, of manganese nodules from the deep seabed. In support of this responsibility, NOAA is required to: (1) engage in environmental and ocean related research to assure that development occurs in an environmentally compatible manner and without "environmental risk" to industry; and (2) help establish a system whereby the United States and other mining nations recognize each other's seabed mining legal regimes and activities; and (3) facilitate compatability among such activities.

During FY 1982, four U.S.-based multi-national mining consortia applied for licenses to explore ten sites in the Pacific Ocean. These original sites were in substantial conflict with one another, as well as with two sites filed by the French and Japanese mining consortia. The conflicts were subsequently resolved and final amendments to the U.S. applications were received in January 1984, reducing the original U.S. applications to four licenses of which three were issued in late FY 1984 and one in early FY 1985. In FY 1984, NOAA assisted the Department of State in concluding an agreement between the U.S. and seven other seabed mining nations which assures against conflicts among mine sites and provides for ongoing consultations on the development of deep seabed mining. The license effort in FY 1987 will involve oversight of Licensees' exploration efforts; processing of amendments reflecting changes in corporate membership and in exploration plans; discussions with applicants regarding the environmental aspects of mining system tests; and, consultation with corporations considering applying for licenses as new entrants.

In parallel with the license process, NOAA has been developing the commercial recovery regulations which should be promulgated in FY 1986. In FY 1987, NOAA will be engaged in discussions with applicants regarding requirements associated with applications for mining permits (e.g. the submission of environmental baseline data). Research efforts will be focused toward the unresolved areas of benthic impact, cost-effective monitoring strategies, marine mineral occurrence and analyses, and resource conservation strategies. The results of these studies will be incorporated into commercial recovery permit terms, conditions and restrictions.

Ocean energy -- This program provides for the administration of NOAA's Ocean Thermal Energy Conversion (OTEC) licensing program as authorized by the Ocean Thermal Energy Conversion Act of 1980 (P.L. 96-320). The commercial use of OTEC technology provides for an alternate and renewable supply of electrical energy for the utility industry and for other industries that produce electricity-intensive products. Funds for the OTEC program have been eliminated. If a viable application should be submitted, the necessary resources will be allocated to conduct the required review for licensing.

Ocean minerals resource evaluation -- Originally, this program had a strong emphasis on providing the research framework to encourage commercial recovery of marine polymetallic sulfides. Since the program has shifted its emphasis to the basic science and processes related to seafloor spreading centers, the 1986 currently available level for this program now appears under the Ocean and Great Lakes prediction research line item.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Ocean minerals			
Licenses issued	1	0	0
Licenses monitored	4	4	4
Commercial recovery issues being studied	11	20	5

Activity: Ocean and coastal programs
Subactivity: Ocean research

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ocean climate research	93	$13,413	100	$13,168	96	$13,138	96	$11,138	...	-$2,000
	(97)	(13,315)	(105)	(13,168)	(101)	(13,138)	(101)	(11,138)	(...)	
Undersea research program	6	6,985	6	9,635	6	9,635	...	...	-6	-9,635
	(6)	(6,973)	(6)	(9,635)	(6)	(9,635)	(...)	(...)	(-6)	
Ocean and Great Lakes assessment and research	123	6,930	...	...	...	...	...	...	...	...
	(128)	(7,763)	(...)	(...)	(...)	(...)	(...)	(...)	(...)	
Ocean and Great Lakes services research	56	2,795	...	...	...	...	...	...	...	...
	(58)	(2,822)	(...)	(...)	(...)	(...)	(...)	(...)	(...)	
Ocean and Great Lakes prediction research	...	...	162	13,885	147	14,464	146	10,820	-1	-3,644
	(...)	(...)	(170)	(13,885)	(157)	(14,464)	(156)	(10,820)	(-1)	
Total requirements	278	30,123	268	36,688	249	37,237	242	21,958	-7	-15,279
	(289)	(30,873)	(281)	(36,688)	(264)	(37,237)	(257)	(21,958)	(-7)	

Note: Permanent position amounts in parenthesis represent workyears, and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To understand the relationship between ocean dynamics and the large-scale, air-sea interaction, especially as it contributes to heat transport and climatic change on seasonal, interannual, and decadal scales; to model and predict climatic change and to apply the results of this research to NOAA service missions; to extend man's ability to function within the marine environment when necessary for achieving NOAA program objectives; to develop, through research and monitoring of the oceans, an understanding of their resources and environments and the changes that may be the result of human activities; to develop a sound scientific basis for management decisions associated with the development and utilization of marine waters and their resources; and to promote safety and economy in maritime activities.

Objectives: To develop the knowledge required to establish a predictive capability for interannual and seasonal climate fluctuations (e.g., El Nino) for North America and other economically important areas; to provide submersibles for NOAA researchers and conduct research in diving health and safety; to conduct process-oriented and problem-oriented, interdisciplinary studies of environmentally stressed marine ecosystems to understand the forces that drive those ecosystems and, thus, enhance our ability to predict the consequences of man's impacts thereon; to identify the nature and extent of marine resources in the Exclusive Economic Zone and the Fisheries Conservation Zone and to better understand the dynamics and possible environmental effects of the processes which produce these resources; to conduct research on hazardous or special marine conditions as a means of improving forecast and warning services for the marine community and for promoting maritime activities; and to develop improved environmental data, information, analytic tools, and advisory services to support users in government and private industry.

Base Program

Ocean climate research -- The oceans, because of their great thermal and mechanical inertia, exert a dominant effect on global climatic variability and long-term trends. The oceans play a key role in the global cycles of water, heat, and carbon. More than two-thirds of all the earth's solar radiation falls on the oceans, where heat energy is absorbed, redistributed horizontally and, subsequently, is transferred to the atmosphere through complex air-sea interaction processes. The interaction is complex because atmospheric wind, precipitation, and cloudiness have substantial effects on the ocean. NOAA's ocean climate research is aimed at gaining a better understanding of ocean dynamics, the variability of sea-surface temperatures, and air-sea interaction processes and their relationship to climate variability. The goal is to improve prediction of interannual, seasonal, and long-term climate changes, which can have significant economic consequences on climate-sensitive industries and on Federal management of resources. NOAA's ocean climate research focuses primarily on tropical ocean studies and world ocean dynamics.

In tropical ocean studies, NOAA concentrates on observations, research, and modeling of ocean dynamics and air-sea interactions in the equatorial Pacific. This effort is comprised primarily of two complementary large-scale programs.

The International Tropical Oceans-Global Atmosphere (TOGA) program is designed to test a theory for short-term climate variations over North America and other economically important regions of the globe. The theory is based upon a growing understanding of the nature of large-scale periodic oscillations in the atmosphere and ocean, in particular the Southern Oscillation, by which a vast region of anomalous warming of sea-surface temperatures occurs in the eastern and central Pacific. The Southern Oscillation and the related El Nino phenomenon represent a significantly different kind of forcing for the atmosphere. A long-term (10-year) monitoring program has been started to provide a rapid response capability for observing the oceanic and atmospheric signatures of an El Nino event and to conduct a program of research in order to accelerate improvement of operational climatic forecasts by the National Weather Service. The monitoring program is currently being broadened to include oceanic and atmospheric parameters in the western Pacific and Indian Oceans. A new generation of drifting buoys will be used to monitor the air/sea heat and moisture fluxes, oceanic heat content, and ocean currents.

The Equatorial Pacific Ocean Climate Studies (EPOCS) program is a large-scale U.S. experiment to gather data and perform analyses and studies on the influence of the equatorial Pacific Ocean on interannual climate variations. EPOCS is concentrating presently on the eastern equatorial Pacific to study ocean processes that are responsible for changes in sea-surface temperatures and to analyze such meteorological elements as winds to obtain a detailed morphology of the Southern Oscillation and the related El Nino event (i.e., the anomalous warming of the Pacific Ocean off of South America). The primary focus of the research is to develop a capability for real-time diagnosis and prediction of various aspects of the phenomenon.

In world ocean dynamics, NOAA concentrates on: (1) developing improved measurement techniques for monitoring the poleward transport of heat by ocean currents and (2) field research and modeling of ocean dynamics and air-sea interactions on a global scale.

The Subtropical Atlantic Climate Studies (STACS) investigate heat transport in the northern subtropical Atlantic Ocean. STACS emphasizes developing the techniques and strategy for monitoring the oceanic transport of heat. The present field effort is the regions of the Florida and Antilles Currents.

Ocean climate modeling and analysis concentrates on mathematical computer models of the global ocean-atmosphere coupled system. Present investigations include such climatically important subjects as global balances of heat, salinity, and carbon dioxide; seasonal variations in oceanic transport; and the response of tropical oceans to fluctuating winds in relation to the El Nino and the Somali Current phenomena.

Undersea research program -- This program funds an ensemble of deep- and shallow-water submersibles which provide NOAA and the scientific community with the opportunity to conduct research in several different underwater environments. This includes the ALVIN (a deepsea submersible funded jointly by the National Science Foundation, the U.S. Navy, and NOAA). The ALVIN and other deep submersibles (2,000-4,000 meters) are used in the Atlantic, Pacific, and Caribbean to investigate deepsea mineral resources, including polymetallic sulfides, as well as general seafloor properties and processes. Shallow-water submersibles (300-2,000 meters) are used off the east and west coasts and the Gulf of Mexico and the Pacific for investigations and studies on fishery habitats in proposed gas and oil drilling areas and on the effects of sewage outfalls, spoil dredges, and hydrothermal vents. Remotely operated vehicles conduct search and survey missions where manned submersibles are not required. Funds are also provided for research in diver physiology and underwater medical studies for the protection, safety, and health of NOAA and commercial divers on the continental shelf (Outer Continental Shelf Lands Act Amendments of 1978 Section 21(e)). NOAA is the only civilian agency doing substantial diving safety research, and improvements in commercial diving capability and safety are based on NOAA's work. This work includes a major program on the effect on divers of working in both polluted and hazardous waters. Finally, the largest element of this line item is a network of national undersea research facilities: (1) the HYDROLAB, a habitat system which has been operated by Fairleigh Dickinson University in tropical waters off St. Croix, Virgin Islands since 1978 to address marine resources assessment, conservation, development, and utilization; (2) the mobile facility AEGIR is being refurbished to be incorporated with the new temperate-water George F. Bond habitat as the facility to replace HYDROLAB--this new system will expand capabilities for conducting research at greater depths and multiple locations in the Caribbean; (3) a surface-supported diving program at the Caribbean Marine Research Center to enhance the conservation, utilization, and management of living marine resources in the Caribbean; (4) a surface-supported, tethered diving program is under development for the University of Southern California at Santa Catalina Island for research in temperate-water marine biology, marine resources, diving physiology, and near-seafloor processes; (5) two submersibles, the Pisces V, capable of carrying three persons to a depth of 6600 feet and the two-man submersible MAKALII (with a maximum depth capability of 1200 feet), are being used at the University of Hawaii for research on marine resources development and management, ecosystem stress caused by pollutants, and ocean energy resources throughout the Pacific basin area; (6) a mobile, open diving-bell system and surface support ship R/V SEAHAWK is operated by the University of North Carolina to investigate fisheries resources, ocean dumping, and dredge spoil disposal; and (7) the University of Connecticut conducts research activities in the nearshore area of the Gulf of Maine and the Great Lakes.

Ocean and Great Lakes prediction research - The oceans and coastal areas represent a major, underutilized resource of food, chemicals, minerals, and energy. Coastal areas are also the setting for competing interests in fisheries, mining, waste disposal, transportation, and recreation. With most of the population residing near the coasts, the ability of the oceans to accommodate wastes must be given increased attention. Similar use conflicts occur in the Great Lakes which are the largest U.S. source of fresh water and sinks for domestic and industrial wastes. Decision makers at all levels of government require access to predicitions that improve impact assessment capabilities, resource management strategies, and safety and economy of operations in the ocean and Great Lakes environments. NOAA's ocean and Great Lakes prediction research focuses primarily on marine ecosystems assessment, marine resources assessment, and marine hazards and lake hydrology.

Marine ecosystems assessment research seeks to improve our understanding of natural oceanic and Great Lakes systems and the impacts of human-induced stresses on their ecosystems. This improved understanding is an essential ingredient of problem-oriented research that is conducted to provide environmental prediction models and advisory services necessary for improved assessment and forecasting capabilities. Research topics include: (1) the measurement, anaylsis, and prediction of currents, water levels, river flows, and air-water interactions; (2) the physical and chemical characteristics of the ocean and coastal regions that influence biological processes; (3) physical and chemical characteristics of water masses and exchange rates between water masses; (4) the investigation of short- and long-term effects of human, agricultural, and industrial wastes on aquatic life and water quality, particularly in nearshore areas; (5) sedimentary fluxes and processes, including sediment-pollutant interactions; and (6) structure and function of aquatic ecosystems and the effects of human activities on these ecosystems, including interactions with naturally occurring processes.

Marine resource assessment research seeks to improve the development and management of marine resources. NOAA is currently concentrating on seafloor spreading centers and fisheries oceanography. Seafloor spreading center research (formerly listed under the Ocean Minerals Resource Evaluation line item) focuses on the physical, geochemical, and biological processes occurring at these centers. Specific objectives are: (1) to better understand the chemical nature and well-being of the oceans by measuring the flux of elements vented into them, (2) to identify and better understand the newly discovered chemosynthetic biologic systems associated with these areas; and (3) to develop a methodology to predict the location of polymetallic sulfide deposits of potential interest to the private sector. Recent results on the Juan de Fuca Ridge include the discovery of the most active venting systems since the identification of the Galapagos Island vents--with both black and white smokers; approximately 300°C water; and sulfide-based tube worms, crabs, and clams. This research element also includes "Fisheries-Oceanography Coordinated Investigations" (FOCI), a multidisciplinary program to study the environmental factors controlling recruitment to marine fish stocks, beginning with the Alaska walleye pollock. Research emphasizes: (1) the influence of environmental variability on such conditions as spawning; egg, larva, and juvenile survival; and predator-prey interactions; and (2) multispecies numerical modeling. Walleye pollock have ranked first or second by volume in the world's fish catch in recent years. However, year class strength has varied by as much as a factor of seven. Such unforeseen fluctuations in commercial fisheries stock levels seriously impair their effective use and the expansion of the domestic fishing industry. The goal of FOCI is to provide more accurate forecasts of marine fish stocks to improve management and provide greater economic benefits to the United States.

Marine Hazards and Lake Hydrology research extends the U.S. ability to predict hazards or special environmental conditions for the oceans, Great Lakes, and Alaskan Arctic and to assess water resources of large lakes. Ongoing research is producing improved forecasts of lake levels; hazardous coastal winds and waves; storm surges, seiches, and tsunamis; and ice growth, movement, and breakup, with the results transferred to NOAA operations. New observational techniques (e.g., airborne imaging radar, airborne laser profilometry, and acoustic tomography) are being developed to improve operations and research.

Finally, NOAA personnel provide advisory services to government; the general public; and commercial, construction, and industrial development organizations. In addition, NOAA personnel participate as representatives of the Department of Commerce in regional, national, and international organizations addressing oceanic and Great Lakes environmental issues.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Scientific and technical publications	118	110	80

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ocean climate research	96 (101)	$13,138	96 (101)	$11,138	... (...)	-$2,000

A decrease of $2,000,000 is proposed in the Tropical Oceans-Global Atmosphere (TOGA) program. This will leave an FY 1987 operational level for TOGA of $2,500,000 in this line item. This amount will be supplemented in FY 1987 by $300,000 of GARP/World Climate Research Program funds in the Atmospheric Climate Research line item. The additional FY 1984-1986 funds were used to cover initial start-up costs (e.g. purchase of equipment) for the TOGA project. NOAA will continue to work with other agencies and nations to ensure that program objectives are met.

The object class detail for this decrease follows:	Annual Amount
Other services	-$800,000
Grants and fixed charges	-1,200,000
Total	-2,000,000

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Undersea research program	6 (6)	$9,635	... (...)	...	-6 (-6)	-$9,635

A decrease of six positions and $9,635,000 is proposed to eliminate the NOAA Undersea Research Program. Specifically, the decrease will terminate funding for: (1) the use of deep and shallow water submersibles ($1,500,000); (2) the NOAA share of support (one-fifth) for the deepsea research vessel ALVIN, jointly funded by NOAA, the National Science Foundation, and the U.S. Navy ($790,000); (3) studies of underwater diving techniques and equipment ($240,000); (4) biomedical research previously funded jointly by NOAA, the U.S. Navy, the National Institute of Occupational Safety and Health, and other agencies ($150,000); and (5) NOAA support of the five regional undersea research programs ($6,955,000). These programs are not central to NOAA's basic mission, but are largely of state and regional concern, and should be funded from private and state resources. High priority services provided from this line item to other NOAA programs will be continued within the available funding level.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
Total compensation	-6	-$240,000	Rockville, MD
Personnel benefits		-27,300	
Travel and transportation of persons		-40,000	
Transportation of things		-3,000	
Rent, communications, and utilities		-188,000	
Printing and reproduction		-14,000	
Other services		-1,944,000	
Supplies and materials		-6,000	
Grants and fixed charges		-7,172,700	
Total		-9,635,000	

Ocean and Great Lakes prediction research	147 (157)	$14,464	146 (156)	$10,820	-1 (-1)	-$3,644

A decrease of $844,000 is proposed to reduce research activities at the Great Lakes Environmental Research Laboratory, (GLERL). This laboratory conducts environmental research with special emphasis on developing prediction tools for improved Great Lakes impact assessment and forecasting. In order to focus Federal expenditures on activities that are clearly the responsibility of the Federal Government, NOAA proposes to reduce Great Lakes hazards and related research, particularly research on ice hazards, surface waves, and water level fluctuations. This research provides services to the states surrounding the Great Lakes; those states and the private sector interests which benefit from these studies should assume a greater share of funding responsibility. The remaining research in the Great Lakes will enable the U.S. to meet the terms of the 1978 U.S.-Canada Water Quality Agreement.

A decrease of one position and $1,800,000 is proposed to eliminate the research program for processes at seafloor spreading centers. The decision to defer further research in this program to a later date is based upon two factors. First, the research conducted by NOAA in FY 1984 through FY 1986, along with the research sponsored by universities, the National Science Foundation, and the U.S. Geological Survey, will provide an adequate basis for understanding general seafloor spreading processes related to the formation and distribution of polymetallic sulfide deposits. Second, commercial development of such deposits is unlikely for some time because of the current state of the metals market and present projections of high costs associated with recovery of polymetallic sulfides from the seafloor. The current uncertainty of the international legal situation further complicates the possible exploitation of these deposits, particularly when they lie outside the U.S. 200-mile exclusive economic zone.

A decrease of $1,000,000 is proposed in the Fisheries-Oceanography Coordinated Investigations (FOCI) program and reduces the base program to $2,000,000. The FOCI program involves meteorologists, oceanographers, and fisheries scientists engaging in coordinated studies of the environmental factors controlling recruitment to economically important fishery stocks. Initial research emphasizes the influence of environmental variability on stocks of walleye pollock. Some savings can be achieved by deferring certain elements of this laboratory and field research program. While this will delay completion of efforts to predict walleye pollock recruitment, it will not affect the long range goals of the FOCI program.

The position and object class detail for these decreases follows:

	Number	Annual Salary Decrease	Location
Total salaries	-1	-$44,430	Newport, OR
Other personnel compensation		-570	
Total compensation		-45,000	
Personnel benefits		-5,200	
Travel and transportation of persons		-6,500	
Transportation of things		-86,100	
Rent, communications, and utilities		-1,300	
Printing and reproduction		-400	
Other services		-1,888,700	
Supplies and materials		-220,000	
Equipment		-490,800	
Grants and fixed charges		-900,000	
Total		-3,644,000	

Additional Resource Information

Resources for sub-line item detail are reflected below:

	1985 Actual		1986 Currently Available		1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ocean and Great Lakes prediction research						
Great Lakes Activities	64	$3,844	64	$3,844	64	$3,000

Activity: Ocean and coastal programs
Subactivity: Ocean services

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ocean and Great Lakes assessments and services...............................	352	$32,356	294	$28,789	283	$29,002	250	$20,102	-33	-$8,900
	(365)	(29,449)	(314)	(32,488)	(304)	(29,093)	(274)	(20,193)	(-30)	
National marine pollution program.........	15	1,292	6	1,301	6	1,309	6	1,309	...	...
	(15)	(1,224)	(6)	(1,362)	(6)	(1,309)	(6)	(1,309)	(...)	
Total requirements.......................	367	33,648	300	30,090	289	30,311	256	21,411	-33	-8,900
	(380)	(30,673)	(320)	(33,850)	(310)	(30,402)	(280)	(21,502)	(-30)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To provide the technical basis for safe and efficient marine transportation, fishing, offshore oil and gas recovery, seafloor mining and dredging, marine recreation, and coastal and offshore construction; to support government activities including naval operations, emergency planning, public works, public health, waste disposal management, marine research and energy development, and coastal zone management; to protect the marine environment and human health from the adverse effects of marine pollution; to develop through research and monitoring of the oceans an understanding of their resources and environments and the changes that may be the result of human activities; to develop a sound scientific basis for management decisions associated with the development and utilization of marine waters and their resources.

Objectives: To provide tide datums for determining private, state, Federal and offshore marine boundaries; to provide historical, real-time, and predictive data for tides, Great Lakes water levels, coastal currents, ocean circulation, other marine variables and statistical wave data; to provide predictive and descriptive data on physical, chemical, biological and geological conditions of the water column and seafloor subject to pollution; to provide engineering and development services to improve efficiency of systems and personnel; to coordinate interagency activities in marine pollution research, development and monitoring; to ensure the rational use of ocean/coastal resources through the provision of information and assessments that encourage efficient resource development, while minimizing environmental damage and reducing multiple-use conflicts; to conduct process oriented and problem oriented, interdisciplinary studies of environmentally stressed marine ecosystems in order to enhance our ability to predict the consequences of human activities; to provide a capability for assessing long-term environmental damage caused by spills of hazardous materials in marine waters; to conduct research on hazardous or special marine conditions as a means of improving forecast and warning services for the marine community and for promoting maritime activities; develop improved environmental data, information, analytic tools; and increase private industry participation in providing ocean data products and services to the user community and to further develop cooperative efforts with other Federal agencies, while maintaining the responsibility to provide improved data observation, collection, national products, warnings and advisories.

Base Program

Ocean and Great Lakes Assessments and Services -- This program supports the national effort to acquire, analyze and disseminate oceanographic data. It provides oceanographic and related meteorological data and information in the form of observations, analyses, assessments, and predictions required for the safe, rational, effective, and economic use of the oceans, coastal zone, and Great Lakes. Data and information are developed to describe the natural environment and the status and trends of the environment due to human activities. The information is provided through publications (e.g., atlases, tide prediction tables, annual reports to Congress), data services, and through real-time transmission of data to ocean users. The program provides national leadership in conducting assessments and disseminating information on multiple ocean uses, such as waste disposal and energy development, in major coastal and ocean regions to identify resource use compatibilities and potential conflicts. National studies, as well as those in representative coastal regions and estuaries assess the impacts of multiple-use activities. Scientific support is provided in cases of Federal assessment of damages from oil and hazardous materials. The data provided by the program are basic to: marine navigation; ocean recreation uses; ocean operations; design of ships, offshore platforms and coastal structures; marine construction; coastal engineering and resource development; land use planning; developing emergency evacuation procedures; determining marine boundary baselines; developing ocean use policies and dumping regulations; and conducting ocean environmental studies.

Under this line item NOAA operates the National Tide Observation Network at a level of 171 permanent coastal stations and the 54-station Great Lakes Water Level Observation Network. Fifty tide stations telemeter real-time water level data in support of storm surge and Great Lakes water level monitoring and marine navigation and the NWS Tsunami Warning System. A total of 150 subordinate short-term tide stations are operated. Prototype stations telemeter real-time tide level data to improve the efficiency and safety of ship operations. A total of 2,780 station-months of tide data and 810 station-months of Great Lakes water level data are analyzed, processed and integrated annually into the tide and water level data bases. In support of the marine boundary hydrographic and other programs, 400 tidal datums will be published and added to the data base during 1986. Modernization of the tide and water level network will continue using the funds appropriated in FY 1986 for the procurement of the Next Generation Water Level Measurement System.

The application of numerical estuarine circulation models will result in a new suite of circulation products and services and reduce the number of required field observations. A numerical model of the Cook Inlet will be calibrated, certified and made operational. Model development will continue for Boston and Charleston Harbors. A model for Miami Harbor will be transferred from the U.S. Corps of Engineers Waterways Experiment Station and adapted for operational use. Ocean current data for estuarine and coastal regions including current direction and velocity vs. depth, temperature and salinity profiles, tide levels and meteorological data will be provided to users.

Annual tides, currents, and water levels products of the program include:

- Tide Prediction Tables published in four volumes containing daily high and low water predictions for 6,000 locations 1 year in advance.

- Tidal Current Predictions published in two volumes which contain predictions at 56 major ports and 2,400 coastal locations, tidal current charts and diagrams for 12 coastal areas, and special predictions for foreign countries.

- Great Lakes Water Level Data including hourly levels, daily mean levels, annual water levels, and 7-day mean levels for 54 stations plus lake discharges, levels, flows, maximum levels, minimum levels, and precipitation summaries.

- Historical Tide Data including 6-minute heights, hourly heights, monthly mean summaries, and daily high and low heights for 6,000 locations plus frequency and duration of tide inundations.

- Tidal Datums (long-term mean levels) for 5,000 coastal locations, plus low water datums and tide zones for reducing hydrographic survey soundings.

Under the authority of Title II of the Marine Protection, Research, and Sanctuaries Act (P.L. 92-532) and Section 6 of the National Ocean Pollution Planning Act (P.L. 95-273), NOAA conducts a comprehensive and continuing national program of research and monitoring on the long-range effects of human activities on the marine environment. Program priorities are set in part by national needs outlined in the National Marine Pollution Program Plan. Because of increasing interest in the development of the resources of the Exclusive Economic Zone (EEZ), priority has been placed on the production of information products and services useful in the resolution of potential conflicts among uses of those resources, including the marine environmental quality resource. In addition, Executive Order 12316 designates the Secretary of Commerce as one of the Federal, "public trustees" for natural resources with the responsibility for recovering damages to marine resources under the Comprehensive Environmental Response, Compensation, and Liability Act (P.L. 96-510). To assist the Secretary in fulfilling this trusteeship responsibility, NOAA conducts a number of studies of the risks from discharges of toxic compounds from "Superfund" hazardous waste dump sites and other sources into estuarine and coastal areas of the Nation.

The following ocean assessment activities are conducted under this line item: (1) publication of a series of atlases on major regions of the U.S. Exclusive Economic Zone containing available information on important physical, biological, and economic characteristics -- the Bering, Chukchi, and Beaufort Seas Data Atlas was completed in FY 1986 and a West Coast and Gulf of Alaska Data Atlas will be completed in FY 1987; (2) update the national data base of 17 types of pollutant discharges from major land and ocean sources throughout the coastal zone and EEZ; (3) completion of a data base on the geographic distribution of the life history of over 300 species of fish, shellfish, and marine mammals for the entire EEZ; (4) continued development of a data base of important characteristics for 100 estuaries throughout the U.S. to identify important environmental problems and resource use conflicts; (5) an annual collection and analysis of the ambient concentrations of synthetic organics in mussels and sediments at 150 stations throughout the Nation's coastal and estuarine areas and similar measurements in bottom fish and sediments in 50 of these 150 stations, as part of NOAA's national "Status and Trends" program; (6) various intercalibration exercises conducted under a NOAA-wide program of quality assurance for measurements of toxic organic chemicals, toxic trace metals, inorganic nutrients, biological rate measurements, and human pathogens; (7) a program of directed research on the consequences of contaminants in estuarine and marine environments; (8) continuing support to the U.S. Coast Guard during emergency responses to spills of oil and hazardous materials; (9) continuing support to the U.S. Environmental Protection Agency during emergency response actions at "Superfund" hazardous waste dump sites; and (10) assessment of the risks to coastal and estuarine resources from toxic compounds discharged from "Superfund" hazardous waste dump sites and other sources. Finally, under a major reimbursable agreement with the Minerals Management Service of the Department of the Interior, NOAA conducts assessments of the effects of oil and gas development of the Alaskan outer continental shelf.

National marine pollution program -- This program implements Sections 4 and 8 of the National Ocean Pollution Planning Act of 1978 (P.L. 95-273) by preparing and updating the 5-year National Marine Pollution Program Plan, coordinating implementation of recommendations in the most current plan, and promoting dissemination of results and findings of marine pollution research and monitoring programs. The third National Marine Pollution Program Plan was published in the fall of 1985. Recommendations for priority action include planning long-term effects studies related to oil and gas development on the outer continental shelf and improving coordination of research and monitoring related to ocean dumping. The National Marine Pollution Program Office (NMPPO) is currently involved in implementing these and other recommendations in the third plan, working closely with NOAA and other Federal agencies. These efforts include the preparation of program implementation plans, state-of-knowledge reviews of particular problem areas, and pilot studies involving several agencies. In addition, NOAA sponsors selected studies and reviews by non-governmental experts, including the National Academy of Sciences. Policy coordination among agencies is effected through the Interagency Committee on Ocean Pollution Research, Development, and Monitoring, which is part of the Federal Coordinating Council for Science, Engineering, and Technology.

Activities in FY 1986 will involve continuation of efforts to assure that Federal programs are properly directed toward priority problems as identified in the third plan and that Federal resources are used in the most efficient and effective manner.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Ocean and Great Lakes assessments and services			
Station months, tide data acquired	2,780	2,780	2,780
Station months, Great Lakes Water level data acquired	810	810	810
Meter months, current data acquired	180	90	90
Wave stations operated	4	4	4
Tidal datums computed	347	400	400
Locations, predicted tide levels	6,000	6,000	6,000
Locations, tidal current predictions	2,400	2,400	2,400
Financial support projects in progress	15	15	13
Long-term effects projects in progress	30	27	27
Major spill responses	5	5	5
Scientific and technical publications	120	130	130
Number of strategic assessment projects supported	5	7	7
OSC lease sale activities planned	12	20	20

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ocean and Great Lakes assessments and services	283 (304)	$29,002	250 (274)	$20,102	-33 (-30)	-$8,900

A decrease of 33 positions and $8,900,000 is requested for this line item.

A decrease of $100,000 is requested in the tides and water levels program. This reduction will require that the operation and maintenance of five real-time tide telemetry systems established during FY 1986 along the Chesapeake and Delaware Canal and the Chesapeake Bay be funded by users of the system.

The decrease requested in the circulatory survey program is three positions and $300,000. In this program, which provides tidal current predictions and ocean current data, the following activities will be modified: (1) processing, analysis, and archiving of existing circulatory data will be reduced; and (2) the number of tidal current predictions updated annually will be reduced. At this level, the accuracy and reliability of tidal current predictions and ocean current data will not be affected. Limited new data will be acquired by contract to support numerical modeling activities. Circulatory survey data previously acquired will be processed, analyzed, and archived. Tidal current predictions for 20 stations of the 2,400 stations covered will be updated annually based on historical data.

A decrease of 20 positions and $5,800,000 is proposed for the ocean assessments program. This decrease would reduce the following activities in FY 1987: (1) the National Status and Trends Program, which assesses the status and trends of environmental quality in coastal and estuarine areas through measurements of the concentrations of synthetic organics and other toxic compounds in bivalves (mussels, clams, and oysters), bottomfish, and sediments at 150 sampling sites throughout the U.S.A.; (2) water quality sampling and modeling of Mid-Atlantic and Gulf of Mexico coastal waters; (3) applied research and assessments of the consequences of contaminants on coastal and estuarine environmental quality (particularly the effects of toxic compounds on the reproductive capabilities of fish populations); (4) generic ocean disposal sssessment and research activities; and (5) resources allocated to the NOAA Quality Assurance Program for Environmental Quality Measurements. Other important ocean assessment activities will be continued at a reduced level with the remaining $6,200,000 in base funds.

A decrease of ten positions and $2,700,000 is requested in the Ocean Services Program. This decrease represents the funding provided to change the emphasis of the program from establishing additional Regional Centers for dissemination of NOAA data to the more economical plan of distributing information through a NOAA port, augmented by the existing NOAA field structure and staff.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-16	-$566,300	Rockville, MD
	-15	-505,300	Seattle, WA
	-2	-54,800	Anchorage, AK
Total compensation	-33	-1,126,400	
Personnel benefits		-117,700	
Travel and transportation of persons		-109,000	
Transportation of things		-110,000	
Rent, communications, and utilities		-611,400	
Printing and reproduction		-42,500	
Other services		-5,382,200	
Supplies and materials		-28,000	
Equipment		-1,372,800	
Total		-8,900,000	

Activity: Ocean and coastal programs
Subactivity: Sea Grant

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Marine resource research and development.....	... (...)	$20,991 (20,424)	... (...)	$22,355 (22,355)	... (...)	$4,472 (4,472)	... (...)	... (...)	... (...)	-$4,472
Advisory services, training, and technology transfer........................	... (...)	15,448 (15,479)	... (...)	15,425 (15,425)	... (...)	2,866 (2,866)	... (...)	... (...)	... (...)	-2,866
National projects...........................	... (...)	402 (444)	... (...)	311 (311)	... (...)	149 (149)	... (...)	... (...)	... (...)	-149
Program management..........................	32 (33)	2,179 (2,192)	28 (27)	2,159 (2,159)	28 (27)	2,159 (2,159)	... (...)	... (...)	-28 (-27)	-2,159
Total requirements..........................	32 (33)	39,020 (38,539)	28 (27)	40,250 (40,250)	28 (27)	9,646 (9,646)	... (...)	... (...)	-28 (-27)	-9,646

Note: Permanent position amounts in parenthesis represent workyears, and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To develop and protect the Nation's marine resources for maximum benefit through application of academic expertise in coordinated research, education, and advisory service programs designed to meet national, regional, and local needs.

Objectives: To accelerate development of marine industry through research into the development, optimal use, and protection (when necessary) of living and mineral resources; to improve, through applied research, the technologies needed for efficient use of marine resources; to educate and train the specialized personnel needed to develop and manage marine resources; to provide significant information on the social, economic, and legal impacts of present and projected marine development; to provide an integrated program of marine advisory and extension services to assist in the effective transfer of research results to governmental, industrial, and private users; to conduct a national projects program to meet specific national needs and problems with respect to cuastal and marine resources; and to support United States educational institutions working with foreign institutions on cooperative projects of mutual benefit.

Base Program

Marine Resource Research and Development -- This program is directed toward discovering and developing both living and non-living marine resources. The primary areas of research are aquaculture, fisheries biology and technology, mineral resources, marine natural products, coastal protection, and offshore structures. These projects help NOAA fulfill its responsibility to effectively manage marine resources and contribute to the promotion of new commercial uses of marine resources. The research is frequently multidisciplinary involving social scientists, economists, and legal specialists as well as a wide range of natural scientists and engineers. This provides a balanced approach to the solution of a variety of problems associated with providing for optimum use of marine resources in a manner consistent with the desire to maintain environmental quality and to assure future availability of renewable resources. Past research programs have: (1) led to improved efficiency of existing marine industries which are composed primarily of small companies; (2) yielded new product lines; and (3) resulted in the formation of new companies to develop marine resources for new markets or by using new systems. In addition, this line item provides $1.25 million for the National Coastal Resources Research and Development Institute authorized by Public law 98-364.

Advisory Services, Training, and Technology Transfer -- The 300 marine advisors are the dynamic outreach arm of the Sea Grant Program. Their functions include technical advice and instruction in marine resource fields, identification and communication of marine community needs to researchers, and the dissemination of research findings aimed at user problems through seminars, workshops, publications, and personal contacts. This program element provides information to marine resource managers (at the national, state, and local levels) and serves as a focus for the transfer of technological applications to the ocean community. The marine advisors work in coordination with communicators to reach the general public through press, radio, television, and other media. Major subject areas addressed by marine agents and specialists include fisheries management, seafood processing and marketing, gear technology, marine recreation, coastal and wetlands management, taxes, and health and safety. Several thousand persons are contacted each month by the agents who provide direct assistance to users of marine resources. Another objective of the National Sea Grant College Program calls for training the personnel needed to develop, utilize, and manage marine resources more effectively. NOAA encourages the addition of advanced marine studies to existing university programs in order to provide trained personnel for marine industries, including commercial fishing, seafood processing, marina operation, boat and engine maintenance, and aquaculture. Efforts are directed toward strengthening course offerings in fields such as ocean engineering, ocean law, ocean management, and marine affairs. Programs for the training of oceanographic and biological technicians are maintained to meet the demand for trained scientific personnel.

National Projects -- Activities designed to address specific problems identified as "national needs" are traditionally conducted on an interuniversity basis.

Program Management -- This program element provides for the continuing coordination, planning, and review of the major reesearch program areas.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Number of organizations supported	36	23	0
Number of projects supported	778	411	0
Number of grant actions processed	51	27	0

Rescission for FY 1986

	1986 Currently Available		1987 Base		1986 Rescission	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Sea Grant program	28 (27)	$39,000	28 (27)	$8,396	... (...)	-$30,604

A rescission of the unobligated balance of the FY 1986 Sea Grant funds, $30,604,000 (object class 41.0), is proposed to close out the National Sea Grant College program in FY 1986. Sea Grant was intended to create a network of colleges and universities with strong programs in marine education and research. That goal has been realized and these established Sea Grant programs should now be fully supported by non-Federal and private sources.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Sea Grant	28 (27)	$9,646	... (...)	...	-28 (-27)	-$9,646

A decrease of 28 positions and $8,396,000 is proposed to terminate the Sea Grant Program. Sea Grant was intended to create a network of colleges and universities with strong programs in marine education and research. This goal has been realized; 21 colleges have been awarded Sea Grant College status, as well as, eight additional institutions that receive funding. Sea Grant College programs have been oriented toward satisfying primarily local, state, and regional needs. More than $460,000,000 has been awarded to these institutions since the inception of the program. These established Sea Grant programs should be fully supported by non-Federal and private sources.

A decrease of $1,250,000 is proposed to terminate Federal support of the National Coastal Resources Research and Development Institute. This program should be supported by the non-Federal and private sources which would benefit most directly from the Institute's research to promote the development of ocean and coastal resources, particularly in the Pacific Northwest.

The position and object class detail for these decreases follows:

	Number	Annual Salary Decrease	Location
Total salaries	-28	-$1,160,694	Rockville, MD
Other personnel compensation		-98,306	
Total compensation		-1,259,000	
Personnel benefits		-133,500	
Travel and transportation of persons		-145,000	
Transportation of things		-10,000	
Rent, communications, and utilities		-105,000	
Printing and reproduction		-5,000	
Supplies and materials		-25,000	
Other services		-75,000	
Grants and fixed charges		-7,888,500	
Total		-9,646,000	

Activity: Ocean and coastal programs
Subactivity: Coastal zone management

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Estuarine sanctuaries........................	...	$2,909	...	$2,059	...	$2,059	...	$1,259	...	-$800
	(...)	(4,482)	(...)	(2,264)	(...)	(2,059)	(...)	(1,259)	(...)	
Marine sanctuaries...........................	19	2,877	16	2,852	16	2,896	16	2,196	...	-700
	(20)	(2,812)	(17)	(2,906)	(17)	(2,896)	(17)	(2,196)	(...)	
States assistance programs...................	...	37,000	...	36,000	...	...	...	...	...	...
	(...)	(42,027)	(...)	(40,223)	(...)	(...)	(...)	(...)	(...)	
Program management...........................	62	3,040	62	3,043	61	3,070	55	2,420	-6	-650
	(64)	(2,793)	(65)	(3,746)	(64)	(3,070)	(58)	(2,420)	(-6)	
Total requirements...........................	81	45,826	78	43,954	77	8,025	71	5,875	-6	-2,150
	(84)	(52,114)	(82)	(49,139)	(81)	(8,025)	(75)	(5,875)	(-6)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: Promote the national interest in rational use and conservation of the Nation's coastal zone by encouraging and assisting coastal states and territories to implement management programs consistent with the Coastal Zone Management Act of 1972 (P.L. 92-583), as amended in 1976 (P.L. 94-370), in 1978 (P.L. 95-372), and in 1980 (P.L. 96-464); designate and manage biologically valuable marine areas in accordance with Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (P.L. 92-532); promote estuarine research and education through the establishment of national estuarine sanctuaries; and, coordinate policy review of critical ocean and coastal resource use issues.

Objectives: Ensure reasonable protection of the Nation's ocean and coastal resources by overseeing Federally approved state and territorial coastal management programs to respond to impacts resulting from offshore oil and gas development; designate special areas of the oceans and Great Lakes as national marine sanctuaries to preserve or restore their conservation, recreational, ecological, or esthetic value; and coordinate NOAA-wide policy review of critical ocean and coastal resources; assist the coastal states and territories in acquiring, developing and operating estuarine areas as natural field laboratories to be used for long-term scientific and educational programs that will provide essential information to coastal management decision-makers.

Base Program

The Coastal Zone Management Act (CZMA) of 1972 was enacted to encourage and assist states in dealing with the increasing and competing demands for the use of the Nation's coastal areas. The CZMA Amendments of 1976, 1978, and 1980 refined and strengthened the authority vested in the Secretary of Commerce, and expanded the range of assistance available to states for developing coastal zone management plans, establishing estuarine sanctuaries and responding to coastal energy development impacts. Now that Federally approved Coastal Zone Management programs have been instituted in almost all coastal states, CZM grants are being phased out; the Office of Ocean and Coastal Resources Management (OCRM) will, however, continue to monitor and coordinate state programs to ensure consistency with national coastal policy. The Coastal Zone Management program has provided more than $500 million in grants to states over the past eleven years.

The coastal zone, the narrow interacting band of land and water along the ocean and Great Lakes shorelines, is important to the Nation for its impact on the economy, biological productivity, recreation, energy development, and esthetic, historical and cultural values. An area of high value and opportunity, the coastal zone has attracted new concentrations of people, investment, and development. These coastal pressures have led to a variety of specific problems which are found in varying degrees along the coastline: irreparable losses of natural resources; degradation of the environment; use conflicts and related costly delays in site approvals; preclusion of future options for site use; missed opportunities for needed development or redevelopment; loss of life and property from coastal storms because of poorly sited developments; and long delays in siting energy facilities.

The CZMA, with its amendments of 1976, 1978 and 1980, established the state level as the focal point for developing effective policies and management techniques for coastal lands and waters. The Federal role assures procedural acceptability of state actions to the Act, assures the consideration of the national interest in state activities, and provides technical assistance.

Title III of the Marine Protection, Research and Sanctuaries Act of 1972 was enacted to protect special marine areas along the U.S. coastline from detrimental activities by man, as uses of the ocean and its resources expand. The national marine sanctuary program provides comprehensive long-term management of these areas in order to preserve their values for future generations. After designation of a sanctuary, the Secretary of Commerce may issue necessary regulations to control activities within the sanctuary and must certify what activities by other agencies may be carried out in the sanctuary.

Estuarine sanctuaries -- Fifty percent matching grants, under Section 315 of the CZMA, are made to state and territorial governments for the acquisition, development and operation of estuarine sanctuaries. These sanctuaries provide natural field laboratories to study and gather data concerning the natural and human processes occurring within coastal zone estuaries. Research in estuarine sanctuaries has proved extremely valuable to coastal zone management decision-makers and the general public. The educational programs continue to attract thousands of students, ranging from elementary through graduate school. NOAA contemplates a national system which is representative of specific biogeographic regions.

Presently 15 estuarine sanctuaries have been established in -- Oregon, Georgia, Hawaii, Ohio, California (two), Washington, Rhode Island, Florida (two), Maryland, Puerto Rico, Maine, North Carolina and New York. In FY 1986, two new sanctuaries will be established; one each in Alabama and Massachusetts, bringing the total system to 17 estuarine sanctuaries. During FY 1987, one new sanctuary will be established. In addition, the final components of the multi-site sanctuary in Puerto Rico will be added. All sites will have management plans completed to guide the development of the sanctuary administration and staffing needs, construction plans, visitor use policies, interpretive programs and research needs and priorities.

Marine sanctuaries -- Title III of the Marine Protection, Research and Sanctuaries Act of 1972 authorizes the Secretary of Commerce to designate marine sanctuaries, with the approval of the President, in ocean waters as far seaward as the edge of the continental shelf, in other coastal waters to the ebb and flow of the tide, and in the Great Lakes or their connecting waters.

The National Marine Sanctuary Program Development Plan has refined the nomination and designation procedures for new sanctuaries and has resulted in a new site evaluation list (SEL). The SEL is a core pool of special marine areas, meeting newly defined identification criteria, from which sites will be selected for further evaluation as active candidates for designation. The program objectives are to protect special marine areas characterized by distinctive resources and human use values and to provide comprehensive geographically focused management for each site. At present, seven areas have been designated as National Marine Sanctuaries: (1) the MONITOR, an area one square mile in diameter surrounding the wreck of the Civil War iron-clad vessel off Cape Hatteras, North Carolina; (2) Key Largo, a 100-square-mile section in the Florida coral reef tract, south of Miami, Florida; (3) the waters around the Northern Channel Island and Santa Barbara Island, a 1,252-square-nautical-mile area off Southern California, containing numerous marine mammals and seabirds; (4) the waters off Point Reyes and around the Farallon Islands, a 948-square-mile area of Northern California, containing special breeding populations of marine mammals and seabirds; (5) Looe Key, a five-square-nautical-mile section of the Florida coral reef track off the lower Keys; (6) Gray's Reef, a 17-square-nautical-mile, live-bottom area off Sapelo Island, Georgia; and (7) Fagatele Bay, a 165-acre area off Tutuila Island in American Samoa containing significant marine habitats including examples of western pacific corals and a deepwater terrace formation.

During FY 1986, two new areas will be designated as National Marine Sanctuaries, bringing the system to a total of nine sites. The new sanctuaries will be: (1) Cordell Bank, located fifty miles west-northwest of San Francisco, California, is an undersea elevation consisting of a complex series of submerged steep-sided ridges and narrow pinnacles on the edge of the continental shelf, and (2) Flower Garden Banks, located 123 miles south of Sabine Pass, Texas on the outer edge of the continental shelf, represent the northernmost thriving, shallow-water tropical coral reef community in the Gulf of Mexico.

States Assistance Programs -- This program has provided grants to coastal states and territories to administer coastal zone management programs approved by the Secretary of Commerce, to provide for public facilities and services required because of outer continental shelf energy activity, to plan for the consequences of energy facilities affecting the coastal zone, and to mitigate environmental recreational losses attributable to coastal energy facilities. As State Coastal Zone Management programs now cover 90 percent of the Nation's 95,000-mile coastline, the state financial assistance program which was instituted to establish state programs has been phased out. Energy-related state financial assistance has also been discontinued since coastal energy development impacts have been less severe than anticipated.

Program Management -- The resources appropriated under this line item provide the staff necessary to: assist coastal states and territories in the development and implementation of their coastal zone management (CZM) programs and in the establishment and management of estuarine sanctuaries. There will be continuing administrative functions associated with the award of financial assistance grants for sanctuaries acquisition, operations and research under Section 315; monitoring of the states' performance for compliance with the terms of the financial assistance awards; the requirements for conducting evaluation of state CZM programs under Section 312; providing assistance to the states and other NOAA and Federal agencies for Federal consistency; the expanded NOAA-wide policy coordination role and the conduct of an ongoing technical assistance program; the review and evaluation of the effectiveness of the states' CZM programs and any program changes, to assure their continued approvability under the CZMA; the monitoring of Federal activities, including marine pollution research and fisheries conservation and management programs, that impact CZM programs to encourage consistency of Federal actions with approved state management programs; and performing policy analyses of critical ocean and coastal resources use issues.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Estuarine sanctuaries:			
Number of established estuarine sanctuaries	15	17	18
Marine sanctuaries:			
Number of new sites designated	0	2	1
Number of sites managed and enforced	7	9	10

Rescission for FY 1986

	1986 Currently Available		1987 Base		1986 Rescission	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
States assistance programs	...	$36,000	...	...	...	-$36,000
	(...)		(...)		(...)	

A rescission of $35,000,000 (object class 41.0) is requested to terminate Sections 306 and 306A, Program Administration Grants. The Coastal Zone Management Program was established in 1972 to assist states in developing the capability to manage their coastal resources. The program was not intended to provide continuing support of the state programs. This program has achieved its goal by successfully developing the infrastructure to manage these resources. The 28 states covering 90 percent of the coastline have operational Federally approved programs. From 1972 to 1984, a total of $227,000,000 has been spent to develop this capability. These programs will now be directed and supported by states and localities, but will continue to benefit from guidance and coordination provided by NOAA.

A rescission of $1,000,000 (object class 41.0) is requested to terminate the Interstate Grants Program under Section 309 of the Coastal Zone Management Act. This rescission is proposed because this program supports studies to be used by local jurisdictions and is already funded by other sources including those jurisdictions.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Estuarine sanctuaries	...	$2,059	...	$1,259	...	-$800
	(...)		(...)		(...)	

A decrease of $800,000 (object class 41.0) is proposed by limiting acquisition of new sanctuary sites to one in FY 1987. By the end of FY 1986, 17 sanctuaries will have been established. The remaining funds are sufficient to manage and conduct research in these sanctuaries.

Marine sanctuaries	16	$2,896	16	$2,196	...	-$700
	(17)		(17)		(...)	

A decrease of $700,000 (object class 25.0) will reduce onsite management and related research activities at the nine designated sites. During FY 1987, additional areas will be under active consideration for designation and could bring the Marine Sanctuary system to ten sites by the end of the fiscal year.

	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Perm. Pos.	Inc.(+) or Dec.(-) Amount
Program management	61 (64)	$3,070	55 (58)	$2,420	-6 (-6)	-$650

A decrease of six positions and $650,000 will result in a resource level which is adequate for the amount of CZM administrative duties required to complete the phase-out of the Coastal Zone Management state grants program, and management of the marine and estuarine sanctuaries programs.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
Total compensation	-6	-$161,000	Washington, DC
Personnel benefits		-18,400	
Travel and transportation of persons		-22,000	
Rent, communications, and utilities		-13,000	
Other services		-433,100	
Supplies and materials		-2,500	
Total		-650,000	

Activity: Ocean and coastal programs
Subactivity: Mapping, charting, and geodesy programs

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Aeronautical chart services	110 (115)	$9,932 (10,196)	99 (106)	$8,828 (9,158)	42 (49)	$8,177 (8,177)	42 (49)	$7,613 (7,613)	... (...)	-$564
Nautical chart services	290 (300)	18,570 (18,613)	297 (312)	17,474 (17,474)	272 (287)	17,302 (17,302)	272 (287)	16,548 (16,548)	... (...)	-754
Coastal mapping services	58 (60)	3,832 (3,981)	61 (65)	3,844 (3,920)	57 (61)	3,796 (3,796)	57 (61)	3,796 (3,796)	... (...)	...
Geodetic reference system	283 (295)	16,611 (17,584)	252 (268)	15,949 (15,949)	164 (180)	15,823 (15,823)	164 (180)	13,623 (13,623)	... (...)	-2,200
Total requirements	741 (770)	48,945 (50,374)	709 (751)	46,095 (46,501)	535 (577)	45,098 (45,098)	535 (577)	41,580 (41,580)	... (...)	-3,518

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To provide a basis for the safety and efficiency of commercial, private and military aviation and for marine transportation, fishing, offshore oil and gas recovery, seafloor mining and dredging, marine recreation, coastal and offshore construction; by supporting government activities including naval operations, emergency planning, public works, marine investigations, energy research, and coastal zone management; and by supporting design and operations of space and defense systems, definition of property lines and political boundaries, position control for maps and charts, large scale construction, environmental research, earthquake studies and hazardous waste disposal.

Objectives: To provide accurate charts, maps and related air navigation information for the National Airspace System; accurate charts and related marine navigation information for 2.5 million square miles of ocean and coastal waters; bathymetric/topographic maps and bathymetric maps for coastal and offshore regions; precise longitude, latitude and elevation of monumented points in the national geodetic reference system and scientific geodetic data; and research, engineering and development for increased efficiency of program operations and effectiveness of products and services.

Base Program

Aeronautical chart services -- Aeronautical charts produced provide air navigation data and flight regulation information to operators of private planes, corporate aircraft, commercial air carriers, military and other government aircraft plus air traffic controllers, Federal Aviation Administration (FAA) management, military personnel, airport operations personnel and equipment manufacturers. This year there will be more than 60 million take-offs and landings in the U.S. by 865,000 pilots. There are an estimated 224,000 general aviation aircraft in the country. Total aircraft operations at FAA towered airports are forecast by FAA to increase from 61.6 million in 1981 to 110.4 million in 1993. Air navigation data and flight regulations provided on NOAA Aeronautical Charts are critical in making decisions for flight planning, aircraft flight navigation, landing, take-off, taxi, adherence to regulations, and traffic control.

The aeronautical charting program carries out aerial surveys of the National Airspace System; processes and analyzes data; and compiles, prints and distributes aeronautical charts, maps, and related air navigation information for the National Airspace System and certain international airways in three product categories:

(1) Visual charts provide information and instructions to pilots flying under Visual Flight Rules (VFR). These depict natural and man-made topographic features, obstructions, airway definitions, airports, radio facilities, hazards, air regulations and procedures.

(2) Instrument charts provide information and instructions to pilots flying under Instrument Flight Rules (IFR). These show the complex enroute airway structure, interconnecting routes, transition routes, airport approach and landing procedures, radio facilities, obstructions, technical data and instructions.

(3) Special Charts and Services provide air navigation data and technical information to air traffic controllers and FAA management. These include radar video overlay maps, controller charts, airport obstruction charts, command center charts and obstruction data in digital form. Special services include support of FAA's Precise Geographic Position and Elevation Program, and cartographic and geodetic verification of data. These products are produced on a reimbursable basis for FAA.

The program maintains the Aeronautical Chart data base which includes all data and information required to appear on aeronautical charts. Data comes from FAA, other Federal agencies, and NOAA surveys. The file contains more than 6 million elements in 20 categories. The program also maintains the airport obstruction file and data base. The program prepares printing negatives and printing plates, prints and warehouses charts and distributes charts to individual users (primarily through sales agents) and to Federal agencies. A total of 10,262 different charts are maintained and issued. More than 9,000 of these charts are updated and issued every 56 days. During the year 350 new charts will be compiled, and 8,700 charts will have minor revisions.

Research and engineering are carried out to implement systems for computer assisted handling of chart data and chart production. During FY 1985 the program benefitted from improved productivity resulting from the introduction of automated equipment in three areas: (1) chart compilation; (2) chart reproduction; and (3) management information.

The private sector and Federal users of these chart products are charged for the NOAA costs of compilation, data base maintenance, and printing and distribution. Until FY 1986, the private sector and Federal agencies reimbursed NOAA only for the costs of printing and distribution. Increased chart prices to the private sector are being phased in for the recovery of their share of compilation and data base maintenance costs. All receipts from the sale of these chart products to the private sector are deposited as "Miscellaneous Receipts" in the Treasury. Federal agencies are fully reimbursing NOAA for their share of the compilation, data base maintenance, and printing and distribution costs.

Nautical chart services -- Nautical charts and marine navigation publications produced by NOAA are basic tools for marine navigation, ocean operations and marine resources planning and management. A significant portion of chart production goes to the Department of Defense and other government agencies to support their activities. More than 200,000 merchant ships, offshore platforms, work boats, commercial fishing vessels and dredges operating in the 200-mile economic zone require charts and maps. State agencies and the private sector depend on NOAA charts and maps for developing land use policy, coastal zone management and resources development.

The nautical charting program plans hydrographic surveys and compiles, prints and distributes charts, maps and marine navigation information in four major categories:

(1) Nautical charts are precisely constructed navigational maps which accurately locate and define shoreline, water depth, surface and subsurface obstructions and hazards, coastal features, landmarks, visual and electronic navigation aids, bottom conditions, channels and other critical navigation data.

(2) Coast Pilot volumes contain important navigation information that cannot be shown graphically on the nautical chart. They supplement the nautical charts with photographs, navigation regulations and descriptions of ports, port facilities, anchorages and landmarks plus data on weather tides and currents.

(3) Bathymetric/Topographic maps through extensive use of contours incorporating 100 percent of available data, provide an accurate and detailed portrayal of the coastline, the seafloor, coastal topography and prominent features.

(4) Notice to Mariners (Local and Weekly) are issued for the timely and accurate dissemination of navigational information received between new editions of the nautical charts or Coast Pilots which have been evaluated to be critical for safety of navigation. The Notices are issued in textual chartlet or tabular form and are the navigational information authority until the next edition of the chart or Coast Pilot is issued.

This program develop priorities and specifications for carrying out hydrographic surveys in the nation's coastal waters, ports and Great Lakes to acquire data required to update and maintain nautical charts and bathymetric maps using 9 NOAA ships, 22 launches and 2 shore based field parties.

Hydrographic data and data obtained from other government agencies and the private sector are analyzed and processed into the Automated Information System data base which is maintained and used by NOAA for production of nautical charts. All data is digitized and stored according to seven geographic regions. A total of 60 hydrographic surveys and 5,700 source documents were processed in FY 1986. Of the 970 charts on issue, 365 were revised in FY 1986 and six new charts were constructed.

To alert chart users to information affecting charts before a chart can be revised and issued, NOAA provided more than 2,800 correctional items to the "Notice to Mariners" program.

The joint bathymetric/topographic mapping program with the U.S. Geological Survey (USGS) is continuing. Bathymetric map manuscripts are compiled by NOAA and integrated with USGS coastal topography. NOAA has supplied 355 bathymetric manuscripts to USGS.

The program prepares printing negatives and printing plates, prints and warehouses charts and maps, and distributes charts and maps to individual users, primarily through sales agents, and to Federal agencies. More than 2,400,000 copies of charts, maps and related documents will be issued in FY 1986.

The private sector and Federal users of these chart products are charged for the NOAA costs of compilation, data base maintenance, and printing and distribution. Until FY 1986, the private sector and Federal agencies reimbursed NOAA only for the costs of printing and distribution. Increased chart prices to the private sector are being phased in for the recovery of their share of compilation and data base maintenance costs. All receipts from the sale of these chart products to the private sector are deposited as "Miscellaneous Receipts" in the Treasury. Federal agencies are fully reimbursing NOAA for their share of the compilation, data base maintenance, and printing and distribution costs.

Coastal mapping services -- This program conducts aerial and ground surveys, performs photogrammetric analysis and compiles maps in three product categories, primarily in support of the preparation of nautical charts and bathymetric/topographic maps: (1) shoreline maps which provide high accuracy shoreline definition and coastal features on a precisely controlled grid map; (2) aerial photographs with high-accuracy geodetic control for photogrammetric analysis to provide ground coordinates and complete shoreline; and (3) coastal maps which show shoreline changes, storm evacuation routes, safety zones and boundary coordinates.

During FY 1986, 14 ground surveys and 10 aerotriangulation projects will be completed to provide high accuracy location of geodetic marks and tide levels for control of 10,000 aerial photographs acquired by one NOAA aircraft during the year. The program maintains a file of more than 500,000 aerial photographs and 14,000 shoreline maps covering the 95,000-mile U.S. coastline.

Development of analytical photogrammetric plotting techniques is continuing to achieve improved efficiencies in data acquisition and shoreline map completion.

Geodetic reference system -- NOAA's geodetic program provides the Nation with the fundamental reference system for determining latitude, longitude and elevation. Geodetic data is the foundation for all surveying, mapping, and charting. Reference points in the two control networks (horizontal and vertical) are the base starting points for land surveyors, engineering consultants, tax authorities, planners, and scientists. Major private and public construction including transportation, defense, utilities routing, dams and water projects, require accurate geodetic survey data for planning, operating and recording details of completed projects. Geodetic data is required to position space and defense systems and launch sites, orient weapon systems, and track the path of missiles and satellites.

This program carries out field surveys, processes survey data, performs sophisticated mathematical computations, carries out research and conducts scientific investigations required to provide four basic categories of products and services:

(1) Horizontal Geodetic information consists of precise latitude, longitude and technical data for 260,000 monumented control points located across the country. These interconnected points constitute the National Geodetic Horizontal Control Network.

(2) Vertical Geodetic information consists of precise elevation above a sea level datum and technical data for 500,000 monumented vertical control points (bench marks) located across the country. These interconnected points constitute the National Geodetic Vertical Control Network.

(3) Geodynamic Data describe motion of the earth rotational axis, earth rotation, earth gravity, variations in sea surface elevation, and provide limited crustal motion data for subsidence, uplift, and large scale lateral movement studies.

(4) Technological Extension Service provides to private industry and state governments standards, procedures, and techniques for land surveying and geodetic measurements, processing field data, analyzing complex geodetic measurements and interacting with the National Geodetic Data Base.

The program operates survey and reconnaissance parties to establish new horizontal control points, develop the network and measure earth crustal motion. Two field parties will resurvey about 10,000 kilometers of primary lines in the vertical network to determine new elevations in areas of subsidence and crustal motion. Increased productivity is the result of the introduction of more efficient vertical control survey methods (e.g., motorized leveling).

After 150 years of measurement and observation across the country, NOAA is approaching the completion of the two geodetic control networks. The present network of 750,000 control points is expected to increase to 900,000 points by the year 2000. Over the relatively long period of establishing the networks, discrepancies and inconsistencies have accumulated from piecemeal connections of new surveys to old surveys, resulting in the wide variations in reliability and accuracy of point position data. To correct this condition we are now readjusting each point in the two networks in reference to nationwide datums by complex mathematical processes. The horizontal network readjustment is scheduled for completion in 1986; the vertical network will be completed in 1995.

The technological extension service program provides guidance, training, and technical assistance at the local level directly to private industry, surveyors, other Federal agencies, and local and state agencies. Interactions between NOAA personnel and individuals and institutions involved explanation and application of survey standards and techniques, the automated processing of survey data by local surveyors, and the addition of local survey data to the National Geodetic Reference System (NGRS). More than 1,000 inquiries and requests for service are handled each year. NOAA leadership at the local level assures a continual increase in participation by the private sector and other government agencies to add control points to the networks and increases reliability of the NGRS. More than 25,000 reports were received from government and private sources providing data on marks recovered during the year. Cooperative geodetic advisory agreements are being continued with 15 states, allowing the transfer of geodetic standards and procedures to private industry, state agencies and local governments.

During FY 1986, NOAA will be cooperating with Louisiana in establishing a multipurpose cadastre system. Multipurpose cadastre is a concept for management of land records and information systems which are tied to the National Geodetic Reference System. The majority of the work will be accomplished by local governments with NOAA establishing the standards and procedures.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Aeronautical Chart Services			
Visual charts, number maintained	182	179	178
Visual charts, copies issued	2,264,500	2,393,000	2,560,500
Instrument charts, number maintained	7,832	8,185	8,314
Instrument charts, copies issued	6,953,204	7,597,000	8,074,800
Special charts, number maintained	2,365	2,446	2,600
Special charts, copies issued	103,220	168,000	173,000
Nautical Chart Services			
Nautical charts, number maintained	971	970	970
Nautical charts, number revised	335	365	365
Nautical charts, copies issued	2,360,000	2,400,000	2,500,000
Coast pilots, volumes revised	8	8	9
Coast pilots, copies issued	50,000	50,000	50,000
Bathy/topo manuscripts completed (cumulative)	355	375	375
Bathy/topo maps, number printed (cumulative)	146	146	228

	1985 Actual	1986 Estimate	1987 Estimate
Coastal Mapping Services			
Aerial surveys, photographs acquired and processed	10,000	10,000	10,000
New shoreline maps completed	75	75	60
Shoreline maps revised	50	50	25
Nautical charts revised	110	110	100
Coastal hazard maps compiled	40	40	20
Geodetic Reference System			
Horizontal control points validated, adjusted and entered into data base	120,000	N/A*	N/A*
Complete kilometers of releveling surveys	8,000	10,000	6,000
Reestablish geodetic control marks	1,400	400	40
Satellite Global Positioning Systems in operation	10	10	11
Very Long Baseline Interferometry (VLBI) observatories (limited operation)	3	3	3
States receiving advisory service	11	15	18

*260,000 points will be readjusted.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Aeronautical chart services	42 (49)	$8,177	42 (49)	$7,613	... (...)	-$564

A decrease of $564,000 (object class 25.0) is requested in indirect aeronautical chart support funding. NOAA's FY 1986 budget request to Congress proposed to fund, on a fully reimbursable basis, the Federal user's share of the data base maintenance, compilation, and printing and distribution costs applicable to the production of aeronautical charts and products. This proposal involved the shifting of functions and funding between the Operations, Research, and Facilities account and the Reimbursable account. The reduction of the indirect aeronautical/nautical chart support funding was not included in the FY 1986 proposal. Therefore, NOAA will waive overhead costs to the Federal users in FY 1986, but will recover full charges in FY 1987.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Nautical chart services	272 (287)	$17,302	272 (287)	$16,548	... (...)	-$754

A decrease of $754,000 (object class 25.0) is requested in indirect nautical chart support funding. NOAA's FY 1986 budget request to Congress proposed to fund, on a fully reimbursable basis, the Federal user's share of the data base maintenance, compilation, and printing and distribution costs applicable to the production of nautical charts and products. This proposal involved the shifting of functions and funding between the Operations, Research, and Facilities account and the Reimbursable account. The reduction of the indirect aeronautical/nautical chart support funding was not included in the FY 1986 proposal. Therefore, NOAA will waive overhead costs to the Federal users in FY 1986, but will recover full charges in FY 1987.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Geodetic reference system..	164 (180)	$15,823	164 (180)	$13,623	... (...)	-$2,200

Four decreases totalling $2,200,000 are proposed in this line item.

A decrease of $500,000 in support of the Vertical Network is requested. Annual releveling activities will be reduced from 10,000 kilometers per year to 6,000 kilometers per year. The completion of the program will be delayed from 1987 to 1995.

A decrease of $550,000 proposed for the Technology Extension Service will reduce the level of guidance, training, and technical assistance provided by the Geodetic Reference System at the local level to those involved in land surveying and geodesy. This program has accomplished its goal of training states to conduct surveys in accordance with national standards, specifications and techniques. Other Federal, state, and local agencies and private surveyors will be expected to voluntarily replace and relocate NGRS monuments and obtain guidance and technical assistance by means of the services and coordination remaining in this program.

A decrease of $400,000 is proposed to terminate Federal funding of the South Carolina Cooperative Geodetic Surveys. This program was initiated in 1979 as a Congressional add-on. The work is well underway and can be turned over to the state to fund completion of the survey. This is a specific state concern and should be the funding responsibility of the state.

Termination of $750,000 in Federal funding for the Multipurpose Cadastre system is proposed. This system will be developed by local government agencies with NOAA providing technical leadership and guidance. This program was initiated in FY 1986 as a Congressional add-on. This is a specific state concern and should be the funding responsibility of the state.

The object class detail for these decreases follows:

	Annual Amount
Travel and transportation of persons................................	-$426,300
Transportation of things..	-20,300
Rent, communications, and utilities................................	-64,500
Printing and reproduction...	-6,500
Other services..	-1,056,100
Supplies and materials..	-131,200
Equipment..	-395,100
Grants and Fixed charges...	-100,000
Total..	-2,200,000

Activity: Marine fishery resource programs
Subactivity: Information collection and analyses

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Resource information	852	$54,505	916	$68,115	885	$69,466	757	$42,807	-128	-$26,659
	(887)	(53,897)	(963)	(69,035)	(936)	(69,516)	(823)	(42,857)	(-113)	
Fisheries industry information	112	9,419	114	8,932	110	9,027	92	5,927	-18	-3,100
	(117)	(9,484)	(120)	(8,932)	(117)	(9,027)	(100)	(5,927)	(-17)	
Information analyses and dissemination	315	18,509	299	17,980	243	17,665	230	16,691	-13	-974
	(328)	(18,663)	(317)	(17,980)	(261)	(17,715)	(249)	(16,741)	(-12)	
Total requirements	1,279	82,433	1,329	95,027	1,238	96,158	1,079	65,425	-159	-30,733
	(1,332)	(82,044)	(1,400)	(95,897)	(1,314)	(96,258)	(1,172)	(65,525)	(-142)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: Provide timely biological, environmental, economic, and statistical information to achieve a continued optimum utilization of living marine resources for the benefit of the Nation.

Objectives: Collect, analyze, and disseminate timely information and recommendations on the status of fish, marine mammal, and endangered species stocks. Collect, analyze and disseminate timely information on the status of subsistence, commercial, and recreational fisheries, and their social and economic importance. Determine the impacts of the taking of marine mammals and endangered species. Provide a sound scientific basis for predicting change in the habitat of living marine resources from natural and human-induced causes, and the impact of that change upon these resources. Improve the quality and timeliness of information services concerning living marine resources, their habitats, and their use.

Base Program

The living marine resources within 200 nautical miles of the coastline of the United States contribute billions of dollars each year to the Nation's economy. Under the Magnuson Fishery Conservation and Management Act (MFCMA) and other statutes and international treaties, NOAA is responsible for providing the scientific and technical information needed to conserve, manage, and develop living marine resources. This information is used by Regional Fishery Management Councils, international fishery commissions, state agencies, and NOAA as a basis for establishing and implementing a wide variety of conservation and management measures. It is also used by Federal agencies to assess the effects of proposed developments and projects upon marine resource populations and habitats and by public and private decision-makers to guide the development of the Nation's fishery resources and maintain suitable fisheries habitat. The information and analyses are the basis for management and development decisions that support the growth and stability of the U.S. fishing industry.

One hundred thirty-nine different fish, marine mammal, and endangered species stocks, as well as their habitats, are currently being assessed by NOAA. These assessments require continuous updating because of the dynamic and variable nature of the marine environment and the stocks involved. To complete these assessments, NOAA collects biological, environmental, and statistical data on fish, marine mammal, and endangered species stocks, their habitats, and use. Analytical models are then used to combine these data to assess trends in stock sizes, determine appropriate yields from resources, and determine their economic and social importance.

Resource information -- Activities are designed to collect biological and environmental data about the Nation's renewable living marine resources and their supporting environment. Renewable living marine resources include major fisheries, marine mammals, and endangered species. Research programs are conducted nationwide by NOAA's fisheries research laboratories and provide fundamental information required by Federal, state and industry decision-makers for management and development purposes.

Scientific surveys are conducted with vessels and aircraft to collect biological and environmental information on the composition, abundance, and distribution of living marine resources of commercial, recreational, or ecological significance. This includes different species of groundfish, crab, herrings, mackerels, shrimp, and salmon, as well as species of marine mammals and sea turtles. Since 1979, NOAA has conducted a national marine recreational fishery statistics survey to increase information on marine recreational species and support management and resource allocation decisions, including the resolution of conflicts among competing user groups. These surveys provide scientific samples used for determining the characteristics of the resource populations. Stock assessments are produced using a combination of information from surveys and information collected directly from the fishing industry. Industry statistics alone often reflect economic and fishing strategy biases which may mask actual resource abundance trends. A combination of NOAA vessels and chartered vessels is used to gather information concerning living marine resources. NOAA will continue to assess the availability and cost-effectiveness of charters as an alternative to use of NOAA vessels for survey activities in each geographical region. Information from surveys is also obtained through contracts with state agencies, universities, and private organizations. Cooperative surveys with foreign countries are also conducted. In addition, data on migratory marine species and environmental conditions in the oceans beyond the continental shelves of the United States are supplemented through the use of data collected by ships of opportunity and satellite overflights. Ship survey data is the foundation for much of the subsequent analysis that supports management and development decision-making.

Information is collected on living marine resource species' mortality and growth rates, age structure, distribution and migrations, physiological requirements and diseases. These data provide for the understanding of biological processes needed for developing biologically sound management strategies. Food chain and predator-prey relationships are particularly important in understanding the complex interactions of marine species. In FY 1986, a comprehensive marine fisheries initiative addressed problems of underutilized resources in the South Atlantic and Gulf of Mexico.

Protected species research includes East coast and bowhead whales, and protected species abundance, distribution, migrations and bioprofiles; Pacific coast marine mammal population trends and impacts of human activity; and fur seal research. Other research focuses on porpoise and monk seals in the Southwest; and bottlenose dolphin in the Southeast. This information is necessary for NOAA to fulfill its Marine Mammal Protection Act and Endangered Species Act responsibilities implemented under the Protected Species Management budget line item of the Conservation and Management Operations budget subactivity.

Accurate prediction of fishery yields is difficult because of the variability in environmental factors that influence abundance of living marine resources. Environmental changes can impact living marine resources significantly during all their life stages, which can then drastically affect future harvests. These changes also affect the distribution and availability of stocks in traditional migratory routes, feeding and spawning concentrations, and fishing grounds. The effects of natural and human-induced changes on marine habitats are studied to determine their impacts upon the abundance, distribution, and physiological functions of species of commercial and recreational significance. NOAA also investigates the effects of dams, power plants, effluents, dumping, dredging, and logging on fish, marine mammals, and endangered marine animals. The resulting increased understanding from research in recruitment dynamics, pollutant effects, and ecosystem impacts helps managers to identify and lessen the causes of mortality. Such action helps increase or maintain marine resource populations. Base program activities include fishery ecology research, Chesapeake Bay studies, habitat research in Hawaii, PCB contamination research, and methodology for habitat resource evaluation. This information is necessary for NOAA to fulfill its management responsibilities under the Habitat Conservation budget line item of the Conservation and Management Operations budget subactivity.

Anadromous fisheries research is conducted in the Pacific Northwest, in the Columbia River Basin, and in the Northeast. This research addresses salmon production and the quality of smolts released from hatcheries. Salmonid research is conducted to improve the production efficiency of salmon hatcheries in the Pacific Northwest and sea ranches in Alaska. Research is also conducted in support of the U.S. - Canada Pacific Salmon Treaty obligations, and to investigate the interception of U.S. salmon by the Japanese high-seas fishery. Treaty research, management and enhancement activities are carried out primarily at NOAA's fisheries research laboratories in Auke Bay, AK, and Seattle, WA. Extensive work to implement the

Treaty is also done in cooperation with the States of Alaska, Washington, Oregon and Idaho, Indian tribes, and the Pacific Salmon Commission located in Vancouver, British Columbia. NOAA's activities are managed by a field office located in Portland, OR. Base program activities also include Atlantic salmon tagging and support for the North Atlantic Salmon Commission.

Advanced technology is developed and used to improve the timeliness and quality of the information on living marine resources and their habitats. In some fisheries, acoustic devices are being used to locate fish and to estimate their abundance. Aerial and satellite sensors are being used and evaluated for locating plankton concentrations, measuring water temperature, salinity and turbidity, tracking fish, mammals and sea turtles, and for directing research and fishing vessels to places of interest as soon as they are identified. The application of advanced technology increases the speed with which large ocean expanses and extensive coastal areas can be surveyed, thereby giving a more complete picture of oceanic conditions and how these conditions change. Commercial and recreational fishermen use the information to reach productive fishery areas quicker and thus achieve substantial fuel savings.

Stock enhancement and disease research is conducted at NOAA's fisheries laboratories to support management decisions affecting the long-term availability of commercial concentrations of certain fin and shellfish stocks. Non-salmonid research and development activities include selective breeding of oysters and other shellfish, studying hatchery disease problems, determining nutritional requirements of shellfish larvae, developing new techniques for culturing larvae, and spawning and rearing scallops and surf clams. Research also includes culturing of Kemp's Ridley turtles to assist in species recovery. These activities also include catfish farming at Stuttgart, Arkansas, a freshwater aquaculture facility also supported by the Department of Interior, and operational support of the Marine Science Center in Newport, Oregon.

Fisheries industry information -- Activities are designed to complete the information data base necessary for making management and development decisions. Economic and statistical information is collected to complement the biological and environmental information collected under the Resource Information budget line item.

Information is collected on the commercial and recreational harvesting, processing, and marketing of living marine resources. This information includes (1) volume and value of catch in domestic and foreign fisheries by species, region, state and type of fishing gear; (2) incidental take or harvest of non-target species; (3) fishing effort and costs associated with catch; (4) volume and value of processed fishery products from domestic harvest and imports; (5) cold storage holdings of fishery products; (6) production of industrial fish products (e.g., fishmeal and oil); (7) the number of operating units and people employed in harvesting and processing fishery products; (8) imports and exports of fishery products; (9) consumption of fishery products; and (10) number of marine recreational fishermen and their catches, effort and expenditures. Through interactions with industry, other government agencies, and through the fisheries management process, NOAA and the states determine data needs and cooperate in the collection and management of these data. Fishing effort and location data are collected by logbooks in some fisheries and from interviews of fishermen in others. Samples of the commercial and recreational catch are also collected for biological and statistical analysis. As a result, NOAA obtains a wide variety of different data from foreign and domestic fishing vessels, surveys of fishermen, records of landings, and onshore fishery facilities. This data is collected in cooperation with the states, foreign governments, and the commercial and recreational fishing industry.

Information analysis and dissemination -- Activities are designed to analyze and disseminate the data collected under the Resource Information and Fisheries Industry Information budget line items.

Information, subsequent analyses, and recommendations concerning the impacts of management and development options are delivered to key users such as the eight Regional Fishery Management Councils, state management agencies, industry, and NOAA. Biological, environmental, economic, and statistical information concerning living marine resources is analyzed (1) to characterize various species, including their reproductive and growth rates, food requirements, interrelationships, habitat requirements, and behavioral characteristics; (2) to assess the present and future status of those stocks of significant commercial or recreational value, including their abundance and geographic distribution; (3) to identify the consequences of natural and human-induced changes in the marine environment on the production and abundance of living marine resources; and (4) to analyze the impacts of fishery management measures on the resources and the industry.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Number of living marine resources (LMR) stocks assessed[1]	139	139	139
Scientific publications published	440	440	428
Statistical records collected (millions)	14.6	14.0	10.1
Computer references generated and disseminated	20,570	20,570	14,200

[1] Includes 111 fish and 28 marine mammal stocks.

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Resource information	885 (936)	$69,466	757 (823)	$42,807	-128 (-113)	-$26,659

A net decrease of 128 positions and $26,659,000 is proposed for resource information activities. The proposed change for FY 1987 includes an increase of $800,000 for a dolphin monitoring program and a number of lower priority program decreases totalling 128 positions and $27,459,000. The remaining base program will permit agency efforts to be directed to the highest priority management needs anticipated for FY 1987.

An increase of $800,000 (object class 25.0) is proposed for dolphin monitoring in the Eastern Tropical Pacific (ETP). Funding for this initiative will be offset by a transfer of unobligated balances from the Fisheries Loan Fund. The proposed increase for FY 1987 is necessary to begin a five-year ETP dolphin monitoring program mandated in the 1984 amendments to the Marine Mammal Act (P.L. 98-364). The results of this program will be used as the basis for evaluating the condition and abundance of ETP dolphin stocks, the appropriateness of current incidental kill quotas, and the determination of future incidental take levels to ensure that the stocks are not depleted. Funding will provide for the collection and analysis of biological specimens obtained from the incidental catch aboard tuna vessels, scientific support for research surveys to identify changes and trends in dolphin populations, and research to test the validity of using observer data as an index to abundance.

A decrease of 14 positions and $1,686,000 is proposed for resource survey activities. These reductions can be achieved through the reduction and termination of lower priority in-house and contractual efforts associated with recruitment studies, ecosystem model development, and resource surveys ($764,000). Resource survey reductions will not impact existing fishery management plans. Assessments of threatened stocks and stocks in need of management will continue. Additional reductions ($922,000) will be made in research on the changes in living marine resource abundance and distribution resulting from variability of atmospheric and oceanic conditions. The application of advanced technology to fisheries data gathering will also be reduced, allowing the closure of NOAA's fisheries laboratory in Bay St. Louis, Mississippi. Advanced technology applications being conducted at other fisheries laboratories will be continued.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-4	-$105,524	Woods Hole, MA
	-1	-37,593	Bay St. Louis, MS
	-2	-76,049	Seattle, WA
	-7	-197,868	Galveston, TX
Total compensation..	-14	-417,040	
Personnel benefits..		-45,749	
Travel and transportation of persons........................		-7,000	
Transportation of things..................................		-2,000	
Rent, communications, and utilities.........................		-14,000	
Printing and reproduction..................................		-2,000	
Other services..		-1,196,711	
Supplies and materials.....................................		-1,000	
Equipment...		-500	
Total...		-1,686,000	

A decrease of 63 positions and $5,133,000 is proposed for habitat research. Research on the physiological and biochemical effects of pollution on fishery resources would be reduced in the Northeast ($3,296,000), including a reduction in lower priority research to develop scientific data on the distribution of toxins and the effects of environmental factors on clams, scallops, hake, crab, bluefish, and groundfish at NOAA's fisheries laboratory in Sandy Hook, New Jersey. Lower priority estuarine research dealing with the quantification of estuarine productivity and its relationship to living marine resource productivity and stock abundance levels would also be reduced at NOAA's fisheries laboratories at Beaufort, North Carolina and Galveston, Texas ($430,000). Lower priority habitat research activities concerned with the consequences of habitat alterations and water quality degradation and their relationships to natural mortality will be reduced at NOAA's fisheries laboratories in Seattle, Washington, and Auke Bay, Alaska ($907,000). This reduction will also eliminate applied research focused on other habitat issues, including OTEC development, ocean mineral mining, coastal habitat mitigation, relationship of dredging to ciguatera poisioning, and reef community structure of natural and degraded areas, conducted at NOAA's fisheries laboratory in Honolulu, Hawaii ($500,000). This proposal would result in the closure of NOAA's fisheries laboratory in Oxford, Maryland. High priority research in this program area will be continued at other fisheries laboratories.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-21	-$644,445	Sandy Hook, NJ
	-15	-398,154	Oxford, MD
	-7	-195,227	Beaufort, NC
	-2	-43,608	Hammond, OR
	-1	-26,381	Auke Bay, AK
	-2	-63,238	Washington, DC
	-3	-90,439	Galveston, TX
	-12	-319,052	Seattle, WA
Total compensation..	-63	-1,780,544	
Personnel benefits..		-195,326	
Travel and transportation of persons........................		-31,500	
Transportation of things....................................		-3,000	
Rent, communications, and utilities.........................		-63,000	
Printing and reproduction...................................		-3,000	
Other services..		-3,053,130	
Supplies and materials......................................		-2,000	
Equipment...		-1,500	
Total...		-5,133,000	

A decrease of 28 positions and $3,097,000 is proposed for termination of stock enhancement and disease research. Non-salmonid research and development activities will be terminated at NOAA's fisheries laboratories in Milford, Connecticut, and Galveston, Texas. Industry will fund aquaculture development in areas where there are research and economic returns to be gained. In the past, industry has funded these types of projects and will continue to invest in these areas without Federal assistance. NOAA funding for the Newport, Oregon, laboratory ($350,000), and for catfish rearing ($375,000) at Stuttgart, Arkansas, will be terminated. This proposal would result in the closure of NOAA's fisheries laboratory in Galveston, Texas.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-9	-$270,000	Milford, CT
	-13	-390,000	Washington, DC
	-6	-180,000	Galveston, TX
Total compensation..	-28	-840,000	
Personnel benefits..		-92,000	
Travel and transportation of persons........................		-29,000	
Transportation of things....................................		-2,000	
Rent, communications, and utilities.........................		-28,000	
Printing and reproduction...................................		-2,000	
Other services..		-2,102,500	
Supplies and materials......................................		-1,000	
Equipment...		-500	
Total...		-3,097,000	

A decrease of 13 positions and $918,000 is proposed for West Coast groundfish research. This will reduce information on the reproduction of shortbelly rockfish and its role in the predator-prey relationship with major recreational species such as salmon and striped bass. It will also reduce support for the Pacific Coast groundfish management plan. This reduction along with a reduction under the Information Analysis and Dissemination budget line item ($86,000 is associated with the Tiburon laboratory) will result in closure of NOAA's fisheries laboratory at Tiburon, California. High priority elements of the marine recreational fisheries program will be continued.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
Total compensation	-13	-$388,278	Tiburon, CA
Personnel benefits		-39,125	
Travel and transportation of persons		-6,500	
Transportation of things		-3,000	
Rent, communications, and utilities		-13,000	
Printing and reproduction		-1,000	
Other services		-465,597	
Supplies and materials		-1,000	
Equipment		-500	
Total		-918,000	

A decrease of $1,275,000 (object class 25.0) is proposed for protected species research. NOAA has completed development of a prototype turtle excluder trawl, and demonstrated its effectiveness to industry. This decrease will reduce field surveys to assess turtle populations and additional field trials for excluder trawls ($500,000). The decrease will also result in reduced NOAA research on bowhead whales ($600,000) and Hawaiian monk seals ($175,000). Remaining base programs will continue high priority studies on sea turtles and Hawaiian monk seals.

A decrease of $1,000,000 (object class 25.0) is proposed for the Southeast Area Monitoring and Assessment Program (SEAMAP). SEAMAP is a state, university and Federal program for collection, management, and dissemination of fishery-independent data. The decrease will reduce the level of effort associated with assessments of marine fisheries resources in the Southeastern Atlantic and Gulf of Mexico. NOAA's remaining base program will continue a core SEAMAP program with states and universities in FY 1987.

A decrease of $400,000 (object class 25.0) is proposed in PCB contamination research. This research activity involved in-depth surveys on East Coast bluefish for determining the existence and extent of elevated levels of PCB contamination in the fish flesh. This research was conducted in cooperation with the U.S. Food and Drug Administration and state fisheries agencies. Remaining base activities will allow NOAA to address high priority contamination problems in FY 1987.

A decrease of $1,000,000 (object class 25.0) is proposed for efforts to develop a standardized habitat evaluation methodology. In conjunction with a related reduction in the Habitat Conservation budget line item, this proposal will eliminate comprehensive research to quantify the value of habitats important to living marine resources. It was also used to assist in implementing NOAA's habitat conservation policy initiatives and in analyzing the degree of compliance with NOAA's habitat recommendations. Remaining base habitat ecology activities will permit NOAA to address major habitat issues in FY 1987.

A decrease of $1,500,000 (object class 25.0) is proposed for Chesapeake Bay studies. This will reduce NOAA's Chesapeake Bay research activities which emphasized the relationship between natural and human-created factors and the response of fish populations. This effort was conducted in cooperation with other Federal and non-Federal agencies. Efforts to clean up the Chesapeake Bay will continue with the Environmental Protection Agency and the States of Maryland, Virginia, and Pennsylvania.

A decrease of $1,500,000 (object class 25.0) is proposed for marine mammal research. This reduction will be used to offset a portion of the cost for fisheries-related research needs under the Ocean and Great Lakes Prediction Research line item. The research entitled Fisheries Oceanography Coordinated Investigations (FOCI) will increase NOAA's understanding of how environmental factors affect stock abundance and improve the ability to predict stock fluctuations.

A decrease of 10 positions and $1,000,000 is proposed for work associated with the Pacific Salmon Treaty. In FY 1986, funds ($13,000,000) were provided to conduct the management and research activities needed to implement the U.S.-Canada Pacific Salmon Treaty, including salmon management, research, and enhancement. High priority work will be continued in FY 1987 with the remaining $12,000,000 Treaty implementation program. In addition, the FY 1987 budget does not include the $200,000 from FY 1986 that was associated with Atlantic salmon. These funds have been retained as part of the Salmon Treaty program on the west coast and Alaska.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
Total compensation..	-10	-$300,000	Washington, D.C.
Personnel benefits..		-33,000	
Travel and transportation of persons........................		-5,000	
Rent, communication and utilities...........................		-10,000	
Other services..		-652,000	
		-1,000,000	

The following decreases were add-ons to the FY 1986 budget for various studies and projects. These activities do not require funding in FY 1987. Remaining base programs for Resource Information activities will meet highest priority fishery research and management needs for FY 1987.

A decrease of $500,000 (object class 25.0) is proposed for dock facilities in Pascagoula, MS, for the NOAA Ship CHAPMAN provided as an add-on in the FY 1986 appropriation. Necessary improvements will be completed in FY 1986.

A decrease of $2,850,000 (object class 25.0) is proposed for a marine fisheries initiative - MARFIN - in the Southeast and Gulf of Mexico. This is a cooperative program for assessment of stock abundance, distribution and production yield estimates; resolution of harvesting, handling and processing problems; and development of product forms and export market opportunities for underutilized species such as menhaden, latent resources, oceanic pelagics, and mackerel.

A decrease of $500,000 (object class 25.0) is proposed for right whale research. Funds for this activity were provided in FY 1986 to study the critically low number of Atlantic Coast right whales in cooperation with the University of Rhode Island.

A decrease of $650,000 (object class 25.0) is proposed for funds provided in FY 1986 to support the Oregon Institute of Marine Biology. The funds enabled the Institute in Charleston, OR, to construct a boat dock, research staging area, and overnight facilities for visiting researchers and faculty. This construction will be completed in FY 1986.

A decrease of $750,000 (object class 25.0) is proposed for debris and fishing gear entanglement studies in the Pacific. The possibility of increased mortality to living marine resources in open ocean areas of the Pacific from entanglement had been a concern to resource managers and was addressed in FY 1986 studies. Remaining base programs will allow NOAA to support such activities.

A decrease of $3,350,000 (object class 25.0) is proposed for salmon enhancement activities. Funds were provided in FY 1986 for contracting with the Alaska Department of Fish and Game to carry out enhancement associated with the U.S.-Canada Pacific Salmon Treaty.

A decrease of $350,000 (object class 41.0) is associated with a one-time appropriation for limnological research in Lake Mead and along the Colorado River. As directed by Congress, these funds, in conjunction with funds appropriated to the Bureau of Reclamation, are being provided to the Environmental Research Center at the University of Nevada (Las Vegas) for a study on benthic population in Lake Mead.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fisheries industry information	110 (117)	$9,027	92 (100)	$5,927	-18 (-17)	-$3,100

A decrease of 18 positions and $3,100,000 is proposed for the economics and commercial fisheries statistics program by reducing data collection activities. The level of effort concerned with economic analyses of the harvesting, processing, and marketing sectors of the fishing industry will also be reduced. NOAA will emphasize near-term data collection and analysis in support of current management plans. This program will continue to focus on high priority current management needs.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-2	-$82,029	Washington, DC
	-9	-235,577	Gloucester, MA
	-1	-26,381	Woods Hole, MA
	-2	-44,205	Terminal Island, CA
	-2	-40,771	Seattle, WA
	-2	-63,980	St. Petersburg, FL
Total compensation	-18	-492,943	
Personnel benefits		-54,076	
Travel and transportation of persons		-9,000	
Transportation of things		-36,000	
Rent, communications, and utilities		-18,000	
Printing and reproduction		-18,000	
Other services		-2,291,981	
Supplies and materials		-108,000	
Equipment		-72,000	
Total		-3,100,000	

Information analyses and dissemination	243 (261)	$17,665	230 (249)	$16,691	-13 (-12)	-$974

A decrease of 13 positions and $974,000 is proposed for lower priority information analysis activities. The remaining base program will focus on meeting the highest priority management information needs expected in FY 1987.

A decrease of 12 positions and $738,000 is proposed to reduce analysis on the structure and function of estuarine and nearshore ecosystems and nearshore fisheries at NOAA's fisheries laboratory in Beaufort, North Carolina, and environmental management activities at NOAA's fisheries laboratory in Sandy Hook, New Jersey. These research activities include (1) determination of major pathways and rates of flux for contaminants, especially heavy metals and pesticides; (2) determination of the effects of contaminants on estuarine and marine organisms; and (3) annual estimation of stock sizes, fluctuations in abundance, and fishing rates in the Gulf and Atlantic menhaden fisheries. Environmental management activities, including the analysis of human-induced changes on the environment and integration of pollution and disease data, will be terminated at NOAA's fisheries laboratory in Sandy Hook, New Jersey. These research efforts are designed to address regional and local problems and are more appropriately carried out by non-Federal entities.

A decrease of one position and $236,000 is proposed by reducing work on improving the analyses used for predicting stock abundance and distribution. Some of these activities are being carried out at NOAA's fisheries laboratory in Tiburon, California (one position and $86,000), which is being proposed for closure. High priority work will continue in order to provide fishery managers and other decision-makers with information on fishery resources and their environment.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-2	-$55,423	Sandy Hook, NJ
	-1	-31,619	Tiburon, CA
	-10	-293,291	Beaufort, NC
Total compensation	-13	-380,333	
Personnel benefits		-41,722	
Travel and transportation of persons		-7,500	
Transportation of things		-9,700	
Rent, communications, and utilities		-13,000	
Printing and reproduction		-4,800	
Other services		-468,445	
Supplies and materials		-29,000	
Equipment		-19,500	
Total		-974,000	

Additional Resource Information

Resources for sub-line item detail are reflected below:

	1985 Actual		1986 Currently Available		1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Resource information						
Resource surveys	278	$16,708	299	$19,304	274	$13,651
Fisheries biology	185	7,684	189	8,034	168	6,166
Protected species biology	61	5,950	63	5,950	60	3,475
Fishery ecology (habitat research)	224	14,844	236	14,994	164	6,311
Anadromous fisheries research	46	3,719	101	15,736	91	13,204
Stock enhancement and disease research	58	5,600	28	3,347	...	...

Activity: Marine fishery resource programs
Subactivity: Conservation and management operations

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fisheries management programs................	206	$29,632	215	$26,686	213	$26,838	213	$13,834	...	-$13,004
	(215)	(30,654)	(230)	(26,759)	(228)	(26,872)	(228)	(13,868)	(...)	
Protected species management................	60	4,635	63	3,660	63	3,718	63	3,718	...	...
	(63)	(6,412)	(66)	(4,712)	(66)	(3,718)	(66)	(3,718)	(...)	
Habitat conservation........................	83	5,399	87	5,311	85	5,328	72	3,059	-13	-2,269
	(87)	(5,183)	(92)	(5,531)	(90)	(5,328)	(78)	(3,059)	(-12)	
Enforcement and surveillance................	131	7,337	134	7,567	130	7,689	130	7,689	...	...
	(136)	(7,393)	(141)	(7,567)	(137)	(7,689)	(137)	(7,689)	(...)	
Total requirements..........................	480	47,003	499	43,224	491	43,573	478	28,300	-13	-15,273
	(501)	(49,642)	(529)	(44,569)	(521)	(43,607)	(509)	(28,334)	(-12)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: Provide conservation and management measures to achieve a continued optimum utilization of living marine resources for the benefit of the Nation.

Objectives: Develop and implement domestic and international fishery management measures needed for the optimum utilization of living marine resources, and development of the U.S. fishing industry. Secure the best terms possible for access of the U.S. commercial and recreational fishing industries to foreign and international fishery resources. Assist the states in conserving and managing the living marine resources in the territorial waters of the United States. Conserve populations of marine mammals and endangered species that are affected by domestic and international human activities. Conserve the habitats of living marine resources and associated ecosystems needed to sustain those resources at optimum levels. Ensure compliance with management regimes for fishery resources, marine mammals and threatened or endangered species.

Base Program

The Magnuson Fishery Conservation and Management Act (MFCMA) established exclusive U.S. jurisdiction over virtually all living marine resources in the 2.2 million square miles of ocean area within 200 nautical miles of the coastline of the United States and its territories. This Act was passed to assure that fishing within this area is conducted under sound biological, economic, and other conditions. Under the Act, the commercial and recreational fishermen of the United States have a first preference over foreign fishermen to harvest these resources. Through management decisions, regulations, enforcement, and conservation activities, NOAA and the eight Regional Fishery Management Councils established by the MFCMA work with the states, industry, and other organizations to provide stability and growth to the living marine resources of the United States and to the domestic fishing industry. These efforts are based upon a continuous flow of data, information and analyses developed under the Information Collection and Analysis budget subactivity. In 1984, over 20,000 domestic and 480 foreign vessels fished within the Exclusive Economic Zone (EEZ) of the United States and harvested over 2.7 million metric tons of food and other products. In addition, other fishery resources, such as tuna, groundfish, anchovies, scallops, and salmon, that range beyond the exclusive fishery jurisdiction of the United States, are harvested by the fishing fleets of the United States and many other countries. We estimate that the 1986 domestic totals will meet or exceed 1984 levels.

Fisheries management programs -- Commercial and recreational fisheries are managed to protect them from overfishing and depletion, to facilitate the increase of the domestic harvest, to expand exports, and to maintain fishery optimum yields so that, for example, the commercial fishermen and processors operate in a stable and profitable environment.

The fisheries of the United States which extend beyond the exclusive fishery jurisdiction of the United States are managed by international organizations under several treaties and international agreements. Currently, ten international fishery management agreements are implemented and involve fifty different countries and species such as halibut, tuna, and salmon. NOAA monitors significant fishery activities in foreign countries to determine their effects on U.S. interests. NOAA acquires information on foreign fishing practices and the fishery policies and programs of foreign governments through the translation and review of technical literature, discussions with foreign and international fishery officials, and communications with U.S. diplomatic officers. Foreign fishing within the EEZ of the United States is also assessed. This information is used by NOAA and the Department of State in negotiating and implementing international fishery agreements. It is also used for determining which foreign countries will be allowed to harvest the fishery resources not utilized by American fishermen within the exclusive jurisdiction of the United States. NOAA participates in numerous negotiations with representatives from foreign countries and international fishery commissions. These negotiations and fishery allocation decisions occur throughout each fishing year and require a continuous assessment of information on the fishing industry of foreign countries.

The Regional Fishery Management Councils established by the MFCMA are responsible for developing fishery management plans for the foreign and domestic fisheries in the EEZ which extends generally from 3 to 200 nautical miles seaward from the coastline of the United States and its territories. NOAA provides the eight Regional Fishery Management Councils with technical and administrative assistance, and financial support to assist them in developing, monitoring, and amending fishery management plans. Each existing plan may have at least one amendment per year. Councils annually review up to 1,000 applications for fishing permits from foreign countries, conduct over 100 public hearings and meetings, and determine the yields and total allowable level of foreign fishing (TALFF) for each fishery under management within their jurisdiction. NOAA reviews the management plans developed by the Councils to ensure compliance with the MFCMA and implements these plans through promulgation and enforcement of regulations. NOAA issues permits for foreign fishing conducted under such plans. Permit fees and poundage fees collected by NOAA from foreign countries with fishing fleets operating within the fishery jurisdiction of the United States could range from $25 to $45 million in 1986. A shift in emphasis from plan development to implementation and monitoring is associated with program direction for FY 1987.

The coastal states are responsible for conserving and managing the commercial and recreational fisheries within their boundaries (generally within 3 nautical miles of the U.S. coastline). Approximately 66 percent of the commercial harvest and more than 75 percent of the recreational fisheries catch comes from state waters. State cooperation and coordination of interjurisdictional state efforts is critical to effective management. NOAA provides technical and financial assistance to the coastal states and Interstate Fisheries Commissions to conserve and manage fisheries, and to participate in the activities of the Regional Fishery Management Councils.

NOAA funds the operations and maintenance of the Columbia River hatcheries authorized under the Mitchell Act, the Columbia River program office, and the salmon vessel buy-back program. The hatcheries mitigate for loss of salmon and steelhead habitat caused by Federal dams. The Columbia River program office contributes to the salmon management plan development, reviews fish ladder and screen designs, assists in water budget and fish transportation activities, and implements provisions of the Northwest Power Planning Act and the U.S.-Canada Pacific Salmon Treaty. The salmon vessel buy-back program helps reduce the over capacity of fishing effort in the fleet by purchasing salmon vessels, licenses, or otherwise reducing fishing effort.

Protected species management -- NOAA is required under three principal Acts relating to protected species to consider and minimize the effects of human activities in the marine environment that interact with these species.

The Marine Mammal Protection Act of 1972 (MMPA) established a national policy for protecting and conserving marine mammals by imposing a moratorium, and certain exceptions, on the taking or importing of marine mammals and marine mammal products. NOAA shares the responsibility for implementing the MMPA with the Department of the Interior and is responsible for more than 100 species of whales, porpoises, seals, and sea lions. NOAA administers the moratorium by developing and implementing procedures to reduce the mortality of marine mammals during domestic and foreign commercial fishing operations, Outer Continental Shelf (OCS) development, and other activities affecting these animals. NOAA processes applications for the taking or importing of marine mammals and conducts public hearings on these applications. Since 1972, 718 scientific research and public display applications have been received and 537 permits have been issued. The take authority for 168 permits is currently valid and 560 permits were monitored during FY 1985. Approximately 60 applications for permits are processed each year. NOAA is responsible for implementing several international agreements concerning marine mammals including the International Convention for the Regulation of Whaling and the Interim Convention on the Conservation of North Pacific Fur Seals, and participates in numerous international negotiations concerning these and other international marine mammal agreements.

NOAA is responsible for the management, conservation, and restoration of 23 marine species listed as threatened or endangered under the Endangered Species Act of 1973 (ESA). Through interagency agreements, NOAA cooperates with the Department of the Interior in listing, protecting, and controlling the importation of threatened or endangered marine species into this country. NOAA also promulgates and administers regulations; reviews state laws, regulations, and management programs for compliance with Federal regulations; monitors certificates which allow limited interstate commerce in certain whale oil and scrimshaw products; and reviews applications and issues permits for scientific research and propagation activities. NOAA provides public education and information services on protected species; participates in regional networks for stranded mammals with universities, state agencies and private organizations; develops species recovery programs; consults with other Federal agencies and develops biological opinions under Section 7 of the ESA to ensure Federal activities are not likely to jeopardize the continued existences of listed species or their critical habitats. Base program activities include studies on debris and fishing gear entanglement problems.

NOAA manages the fur seal herd, located in the Pribilof Islands, as authorized by the Fur Seal Act of 1966, as amended (P.L. 98-129), and conducts supporting research under the protected species biology program in the Resource Information budget line item. NOAA is responsible for the management and harvesting of the northern fur seals under the Interim Convention on Conservation of North Pacific Fur Seals. NOAA also contributes to the retirement fund established by the Fur Seal Act for Aleuts. A $20 million trust fund was established with the State of Alaska in 1983 for the benefit of the residents of the Pribilof Islands. The trust fund provides capital to allow for transition from a Federally supported economy to a self-supporting fishing and tourism-based economy. This eliminated the need for continued Federal funding in support of administration of the Islands.

These activities use scientific information provided from research on the biology of protected species conducted under the Information Collection and Analyses budget subactivity as the basis for protected species management and conservation.

Habitat conservation -- Habitat management activities are vital for the long-term survival and health of living marine resource stocks including important target species of U.S. commercial and recreational marine fisheries.

NOAA provides Federal agencies with information and recommendations concerning the environmental effects of numerous proposed developments and projects which affect the habitats of marine fish populations with significant commercial and recreational value. These agencies are required, under the Fish and Wildlife Coordination Act (FWCA), to consult NOAA concerning the impact of their proposed actions on fisheries habitats. NOAA provides consultative support under the FWCA, the National Environmental Policy Act of 1969, the Clean Water Act of 1977, and other legislation. The Magnuson Fishery Conservation and Management Act also gives broader authority and opportunity for NOAA to achieve habitat conservation objectives. Typical subjects for review are construction projects by the Bureau of Reclamation and the Army Corps of Engineers; projects requiring Corps of Engineers' permits for dredging and filling to create industrial and residential waterfront property; projects requiring Federal Energy Regulatory Commission licenses for hydropower plant construction; and projects requiring discharge permits from the Environmental Protection Agency.

To assess potential environmental impacts, NOAA annually reviews approximately 8,000 permit applications filed with the Corps of Engineers. In 1985, such applications covered over 40,000 acres of coastal habitats with annual fisheries values estimated in excess of $8 million. It also reviews and provides technical assistance on fisheries matters important to state coastal zone management plans, special area management plans, proposed marine and estuarine sanctuaries, and Outer Continental Shelf oil and gas exploration and production activities. These consultations are intended to minimize or eliminate adverse impacts on marine fish populations by recommending alternative designs which would be compatible with a healthy marine environment. Permit reviews are planned and coordinated to minimize costly delays to permit applicants. During FY 1985, NOAA continued its habitat conservation policy designed to establish firm management and research coordination. The policy emphasizes identification and action on priority resource issues, and supports the involvement of the Regional Fishery Management Councils, states, industry, private interests and other Federal agencies involved in habitat conservation activities.

These activities use scientific information provided from habitat ecology research conducted under the Information collection and analyses budget subactivity as the basis for habitat conservation.

Enforcement and surveillance -- Activities support the effective enforcement of existing laws and regulations and comprise one of the key ingredients for effective management efforts to support the growth and stability of the domestic fishing industry.

NOAA enforcement agents investigate violations of Federal laws and regulations under the MFCMA, the MMPA, the ESA, the Lacey Act, and other Federal statutes and international agreements relating to living marine resources. Enforcement agents investigate violations of Federal laws and regulations to ensure that both foreign and domestic fishing vessels are operating in accordance with fishery management requirements. NOAA also protects living marine resources by investigating illegal importation or interstate transportation of parts or products of protected species. This includes conducting the full range of investigative activities including the purchase of evidence and information, seizure of contraband, and management of operating funds for covert operations and undercover activities, by enforcement agents. Enforcement and surveillance activities involving fishing vessels are planned and conducted in cooperation with the U.S. Coast Guard, which provides aerial and surface patrol craft. NOAA also charters aircraft to supplement the Coast Guard's effort and enters into cooperative agreements with state enforcement agencies. Shoreside activities also require the use of government unmarked sedan vehicles for carrying out undercover operations and investigations. These actions reduce the illegal harvesting and taking of stocks and fishing gear conflicts, and ensure that conservation and management measures are met. Surveillance activities also provide information concerning catches and fleet movements used for managing domestic and foreign fisheries and in international negotiations.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Fishery Management Plans implemented (cumulative)	32	35	37
Regional Fishery Management Council formal meetings	56	56	37
Public hearings conducted (and public comment periods)	101	125	85
Protected species active permits monitored	293	560	560
Habitat recommendations provided on Federal permits and projects	7,500	8,500	7,800
Violations investigated1/	3,206	2,120	2,100

1/ Excludes violations based on Tuna/Porpoise observer data. The 1985 violations are considerably more than the FY 1986 and 1987 estimates because an unusually severe enforcement situation (Lacey Act) existed in 1984 and persisted into 1985.

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fisheries management programs...	213 (228)	$26,838	213 (228)	$13,834	...	-$13,004

Decreases totalling $13,004,000 are proposed for lower priority activities in the fisheries management program line item. Management regimes will be continued in FY 1987 for those stocks under approved management programs.

A decrease of $3,500,000 (object class 41.0) is proposed for Regional Fishery Management Council administration and operations. This change results from increased efficiencies in administrative functions and a shift away from plan development to plan implementation. Originally it was estimated that 80 fisheries needed management; however, it is now estimated that only 40 fisheries are in need of management. The reduction in Council funding will not impact the number of fishery management plans in place. Greater reliance will be placed on utilizing NOAA's programmatic expertise to provide the Councils with needed information.

A decrease of $1,250,000 (object class 25.0) is proposed for the salmon vessel buy-back program. This program is administered for NOAA by the States of Washington and Oregon. This subsidy program is an ineffective method to address the structural problem of excess harvesting capacity that the salmon industry faces in the Northwest. This proposal will terminate Federal spending directed at reducing the levels of non-Indian salmon fishing capacity in the Columbia River. General taxpayers' dollars should not be used to subsidize a program that benefits a specific group. This program is not essential or basic to NOAA's mission and should not be a Federal responsibility since the benefits accrue directly to the states. States have received $14.6 million to date under this program.

A decrease of $8,254,000 (object class 25.0) is proposed for Columbia River programs. This will terminate NOAA funding for Columbia River hatchery operations and maintenance. However, NOAA will continue its high priority Columbia River salmon research to support fishery management decisions under the Resource Information budget line item. Legislation will be proposed to transfer funding responsibilities to a non-Federal source.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Habitat conservation..	85 (90)	$5,328	72 (78)	$3,059	-13 (-12)	-$2,269

A decrease of 13 positions and $2,269,000 is proposed for the habitat conservation program by reducing lower priority work on environmental impact analysis and associated mitigation work ($1,424,000) and other lower priority habitat conservation activities ($845,000). Selected high priority projects with potential for severe damage to fisheries resources will be addressed. Cooperation will continue with the Corps of Engineers, EPA, the Bureau of Reclamation, and other Federal regulatory and construction agencies who solicit NOAA's advice under provisions of the Fish and Wildlife Coordination Act (FWCA).

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-2	-$50,461	Washington, DC
	-8	-246,155	Gloucester, MA
	-3	-79,804	Juneau, AK
Total compensation	-13	-376,420	
Personnel benefits		-41,293	
Travel and transportation of persons		-7,500	
Transportation of things		-4,000	
Rent, communications, and utilities		-3,000	
Printing and reproduction		-1,000	
Other services		-1,821,787	
Supplies and materials		-3,000	
Equipment		-1,000	
Total		-2,269,000	

Additional Resource Information

Resources for sub-line item detail are reflected below:

	1985 Actual		1986 Currently Available		1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fisheries management programs						
Regional Fishery Management Councils	...	$7,200	...	$7,200	...	$3,700
Columbia River hatchery operations and maintenance	...	8,254	...	8,254	...	...
Columbia River program office	15	1,700	...	... 1/	...	... 1/
Vessel buy-back program	...	2,500	...	1,250	...	...

1/ In FY 1986, support (15 positions and $1.7 million) for this office was transferred to the Resource Information budget line item and included with funding to implement the U.S.-Canada Pacific Salmon Treaty.

Activity: Marine fishery resource programs
Subactivity: State and industry assistance programs

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Grants to states..............................	1 (1)	$8,000 (8,185)	... (...)	$10,500 (11,479)	... (...)	$5,682 (5,682)	... (...)	... (...)	... (...)	-$5,682
Fisheries development program.................	206 (215)	13,550 (12,795)	232 (245)	12,702 (13,394)	207 (224)	12,519 (12,519)	69 (99)	$2,964 (2,964)	-138 (-125)	-9,555
Financial services program administration....	17 (18)	374 (374)	16 (25)	656 (656)	16 (25)	656 (656)	... (...)	... (...)	-16 (-25)	-656
Total requirements............................	224 (234)	21,924 (21,354)	248 (270)	23,858 (25,529)	223 (249)	18,857 (18,857)	69 (99)	2,964 (2,964)	-154 (-150)	-15,893

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: Increase the benefits to the United States from the Nation's commercial and recreational fisheries.

Objectives: Increase the sale of fresh and processed fishery products in the United States and abroad by providing technical assistance on product quality, safety, and public health impediments to the growth and stability of the U.S. fishing industry. Assure consumers of the safety, quality, and wholesomeness of seafood products. Reduce the U.S. fisheries balance of trade deficit by increasing exports of products from underutilized and traditional fisheries. Provide complete and prompt financial services to the U.S. fishing industry to ensure access to capital at reasonable rates and maturities.

Base Program

There is a great potential for future development and expansion of the commercial and recreational fisheries of the United States. Marine fishery resources within the exclusive fishery jurisdiction of the United States will support annual harvests of approximately 8 million metric tons, or an increase of approximately 250 percent above present harvests. The greatest expansion can occur in fisheries that are now mostly bypassed by American fishermen, including Alaska bottomfish, squid, Pacific hake, and Gulf of Mexico groundfish. The Magnuson Fishery Conservation and Management Act (MFCMA) reflects the policy of Congress to encourage the full use of available resources by the U.S. fishing industry. The American Fisheries Promotion Act of 1980 reaffirmed this policy and expanded NOAA's responsibilities to promote the full development and use of these resources. Close cooperation with the states is required because of the split jurisdiction between states and the Federal Government.

Grants to states -- This line item contains grants to states authorized under the Commercial Fisheries Research and Development Act of 1984 (P.L. 88-309) and the Anadromous Fish Conservation Act of 1965 (P.L. 89-304).

The Commercial Fisheries Research and Development Act of 1964 (P.L. 88-309) authorizes NOAA to work with the 50 states, the Commonwealths of Puerto Rico and the Northern Mariannas, the Governments of the Virgin Islands, Guam, and American Samoa, and the Trust Territory of the Pacific Islands in carrying out research and development of commercial fishery resources. States are reimbursed up to 75 percent of the cost of these projects. These funds are distributed on the basis of legislative formula with no state receiving an apportionment for any fiscal year of less than one-half of one percent or more than 6 percent of the funds appropriated. Examples of projects recently receiving grant assistance are commercial fisheries statistics systems, assessment of offshore commercial fisheries resources, assessment of commercial fisheries stocks in the Great Lakes, inventory and study of estuaries, and aquaculture. Disaster aid assistance is provided under Section 4.b. of this Act to mitigate the adverse effects of natural disasters involving fisheries resources. In FY 1986, the States of Alabama and Florida were provided $3 million to offset storm damage to the oyster industry resulting from Hurricane Elena.

NOAA makes grants under the Anadromous Fish Conservation Act of 1965 (P.L. 89-304) to conserve, develop, and enhance the Nation's anadromous fisheries resources, including fish in the Great Lakes that return up rivers to spawn. This Act is administered jointly with the Department of Interior's Fish and Wildlife Service. Federal funds up to 50 percent of project costs (66 2/3 percent for multi-state projects) may be provided to state fisheries agencies, universities, and other non-Federal participants in the 31 states bordering the oceans and Great Lakes. Examples of projects funded under the Act are (1) development of hatchery techniques for Pacific salmon and steelhead trout; (2) prediction studies for pink and chum salmon; and (3) construction of fish screens and hatcheries. Pacific Coast hatcheries built or operated by these grants annually produce over 10 million young salmon and steelhead trout and have saved 10 to 12 million salmon annually from irrigation systems. Additionally, several alewife fish runs have been restored in East Coast streams and biological information has been collected on these and other anadromous fish stocks for improved management. This program also includes grant-in-aid support for striped bass research under Section 7 which is specifically designed to identify the cause or causes of the decline in striped bass stocks.

Fisheries development program -- This line item supports NOAA's principal fisheries research and development activities. It also provides for NOAA's fisheries product quality and safety programs.

Fisheries development activities conducted under this line item are authorized under the Agricultural Marketing Act of 1946, Saltonstall-Kennedy Act of 1954, Fish and Wildlife Act of 1956, and the American Fisheries Promotion Act of 1980. Collectively they are designed to achieve optimum utilization of fisheries resources for the benefit of the Nation by assisting U.S. industry to overcome impediments associated with the development of underutilized species and enhance the value and productivity of traditional fisheries. Program activities include: (1) conduct of harvesting, processing, product, and market research and development activities through in-house facilities and management of the Saltonstall-Kennedy grants program; (2) providing the U.S. fishing industry with foreign market access through government-to-government trade negotiations, export marketing services and information, and coordination with related trade development activities of the Department of Commerce's International Trade Administration, U.S. Department of Agriculture, and U.S. Trade Representative; (3) development and promulgation of product quality and identity standards; and (4) research to respond to product quality and safety issues.

Program objectives include (1) providing feasible resource alternatives to fishermen and processors in traditional fisheries which are unable to support current levels of utilization; (2) achieving economic growth through increased harvesting, processing, and marketing of available resources, including underutilized resources, and upgrading the use and value of traditional fisheries; (3) assisting industry in producing and marketing safe and wholesome seafood products that are properly identified and labeled for domestic and international trade. The base program includes programs at NOAA's fisheries laboratories in Gloucester, Massachusetts; Charleston, South Carolina; Pascagoula, Mississippi; and Seattle, Washington; regional offices in Gloucester, Massachusetts; St. Petersburg, Florida; Terminal Island, California; Seattle, Washington; and Juneau, Alaska; and the headquarters office in Washington, D.C. It also provides for fish inspection program support, menhaden research and development, and Gulf of Mexico underutilized species research.

Financial services program administration -- Financial services program administration is provided to assist the U.S. fishing industry to use the fishery resources of the United States. Fishing is a capital-intensive industry conducted mostly by independent vessel owner/operators. These fishermen do not have access to private financial markets for long-term capital with which to finance their vessels and equipment. The resulting short-term debt burden in an industry with widely fluctuating incomes is a major destabilizing force in U.S. fisheries. It also inhibits private investment which would otherwise assist in developing underutilized fishery resources.

NOAA provides three different financial services to the U.S. fishing industry to mitigate these problems. These services are provided under (1) Section 607 of the Merchant Marine Act of 1936 (46 USC 1177), which authorizes the Fishing Vessel Capital Construction Fund program; (2) Section 4 of the Fish and Wildlife Act of 1956 (16 USC 742(c)), which authorizes the Fisheries Loan Fund program; and (3) the United States Fishing Fleet Improvement Act (46 USC 1401-1413), which authorizes a fishing vessel construction differential subsidy program. The Capital Construction Fund allows fishermen to construct or reconstruct fishing vessels with before-tax, rather than after-tax dollars. Owners of domestic commercial fishing vessels, under terms of individual contracts with NOAA, deposit funds in local financial institutions for purposes of buying, building, or reconstructing vessels. Federal income taxes are deferred on these funds, along with earned interest remaining on deposit, allowing the fishermen to accumulate greater capital and reserves for expansion. NOAA administers the Fisheries Loan Fund to ensure compliance with outstanding loan agreements. NOAA also administers the United States Fishing Fleet Improvement Act to ensure compliance with outstanding subsidy contracts, and oversees ownership transfers, assumptions, and amendments to these subsidy contracts. NOAA partially funds the administrative expenses for carrying out these three programs. The balance of the expenses are funded through fees collected from vessel owner/operators under the programs.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Fisheries development and utilization projects initiated or continued (S-K)	89	56	0
Fisheries development and utilization projects completed (S-K)	50	50	56
Number of export marketing activities (fairs, shows, or trade missions)	6	0	0
Number of new or revised product specifications and standards	8	2	3
Cumulative number of product specifications and standards operational at EOY	34	36	39
Number of trade consultations conducted	3	3	0

Decreases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Grants to states	... (...)	$5,682	... (...)	...	... (...)	-$5,682

A decrease of $5,682,000 (object class 41.0) is proposed for the fisheries grant-in-aid programs. The present grant program structure provides only limited Federal control to ensure that Federal needs are met, and many of the projects funded by these grants are more appropriately state and industry activities. Under the Commercial Fisheries Research and Development grant program, funds are provided to states that are not directly involved with marine fisheries issues that would support the basic mission of NOAA. This reduction would terminate grants to states ($4,250,000) used for carrying out research and development activities on commercial fisheries resources under the Commercial Fisheries Research and Development Act of 1964 (P.L. 88-309). The anadromous fisheries grant program would be terminated ($932,000) thus eliminating funding for projects to conserve anadromous resources, and to conduct striped bass research ($500,000) under the Anadromous Fish Conservation Act of 1965 (P.L. 89-304) except for funding provided under the Resource Information line item for the Pacific Salmon Treaty program to collect salmon data on the west coast and Alaska.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fisheries development program	207 (224)	$12,519	69 (99)	$2,964	-138 (-125)	-$9,555

Decreases totalling 138 positions and $9,555,000 are proposed in the fisheries development program. NOAA will serve as a catalyst for private sector initiatives in FY 1986 by providing a core product quality and safety research program.

A decrease of 52 positions and $3,000,000 is proposed for the fisheries development research and services. This will eliminate activities which support domestic and export market expansion, application of technology advances, consumer services, management support for the Saltonstall-Kennedy grants program, market news programs, and fisheries trade policy analysis. NOAA support and assistance to industry in developing new markets and non-traditional species will also be terminated. These services can better be provided by the industry itself. Market forces will dictate more efficiently which species are commercially sought. Further, industry and the Department of Commerce's International Trade Administration will fund market promotion in foreign nations, if required. This reduction will result in the closure of NOAA's fisheries development offices in Washington, D.C., Gloucester, Massachusetts, St. Petersburg, Florida, Terminal Island, California, Seattle, Washington, and Juneau, Alaska.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-20	-$676,094	Washington, DC
	-7	-160,573	Gloucester, MA
	-12	-342,913	St. Petersburg, FL
	-3	-78,370	Juneau, AK
	-6	-157,591	Terminal Island, CA
	-4	-98,771	Seattle, WA
Total compensation	-52	-1,514,312	
Personnel benefits		-166,122	
Transportation of things		-12,000	
Rent, communications, and utilities		-52,000	
Printing and reproduction		-10,000	
Other services		-1,239,566	
Supplies and materials		-5,000	
Equipment		-1,000	
Total		-3,000,000	

A decrease of 86 positions and $4,555,000 is proposed for the product quality and safety research. This reduction will decrease research which addresses possible public health hazards involving the consumption of fishery products, including those under DOC inspection at NOAA's fisheries laboratories in Pascagoula, Mississippi, and Charleston, South Carolina. It will terminate utilization research at NOAA's fisheries laboratories in Gloucester, Massachusetts, and Seattle, Washington. Harvesters, processors, distributors and retailers that benefit from domestic and foreign consumer demand should provide quality and safety information. This reduction, along with that in fishery development research and services, will result in closure of NOAA's fisheries laboratory in Gloucester, Massachusetts. The building currently occupied by this laboratory may be used for consolidation of other NOAA activities in the Gloucester area. NOAA will continue a core product, quality and safety research program at its Charleston, SC, fisheries laboratory.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-10	-$336,473	Washington, DC
	-21	-634,058	Gloucester, MA
	-20	-609,686	Charleston, SC
	-9	-195,486	Pascagoula, MS
	-3	-92,615	Kodiak, AK
	-23	-689,000	Seattle, WA
Total compensation	-86	-2,557,318	
Personnel benefits		-281,304	
Travel and transportation of persons		-41,500	
Transportation of things		-12,000	
Rent, communications, and utilities		-86,000	
Printing and reproduction		-8,000	
Other services		-1,561,878	
Supplies and materials		-5,000	
Equipment		-2,000	
Total		-4,555,000	

A decrease of $1,000,000 is proposed for menhaden research and development in the conversion of whole menhaden into surimi and minced forms. This proposal will eliminate research designed to determine economic and technical feasibility, produce developmental quantities of test material, and determine procedures necessary to maintain menhaden for human consumption. Based on FY 1986 activities conducted by NOAA, industry can assume this role and continue development on menhaden in FY 1987.

The object class detail for this decrease follows:

	Annual Amount
Travel and transportation of persons	-$40,000
Transportation of things	-15,000
Other services	-300,000
Equipment	-645,000
Total	-1,000,000

A decrease of $1,000,000 (object class 25.0) is proposed for fish oil research activities. This funding was provided in FY 1986 for producing refined fish oil for use in medical research on the health benefits of fish oil and is not required to continue in FY 1987.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Financial services program administraiton	16 (25)	$656	... (...)	...	-16 (-25)	-$656

A decrease of 16 positions and $656,000 is proposed for the transfer of financial services program administration activities to the Grants and Loans Administration of the Department of Commerce. This would result in more efficient management of the close out of financial assistance programs proposed for termination. Similar programs for which the Department is responsible are also being transferred to the Grants and Loans Administration Office.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	12	-$360,000	Washington, D.C.
	-1	-30,000	Gloucester, MA
	-1	-30,000	Terminal Island, CA
	-1	-30,000	St. Petersburg, FL
	-1	-30,000	Seattle, WA
Total compensation	-16	-480,000	
Personnel benefits		-48,000	
Travel and transportation of persons		-7,000	
Transportation of things		-5,000	
Rent, communications and utilities		-16,000	
Printing and reproduction		-1,000	
Other services		-97,000	
Supplies and materials		-1,000	
Equipment		-1,000	
Total		-656,000	

Additional Resource Information

Resources for sub-line item detail are reflected below:

	1985 Actual		1986 Currently Available		1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Grants to states						
Comm. fish. grants to states (P.L. 88-309)	...	$4,500	...	$4,250	...	...
Disaster aid (P.L. 88-309)	...	...	...	3,000	...	...
Anadromous grants (P.L. 89-304)	...	3,500	...	3,250	...	...
Fisheries development program						
Development grants (funded by S-K)	...	9,051	...	8,007	...	...
Fisheries development research and services	52	3,245	52	3,000	...	...
Product quality and safety	154	7,805	180	7,702	69	$2,964
Fish inspection program	...	500	...	...	...	...
Menhaden research and development	...	1,000	...	1,000	...	...
Gulf underutilized species	...	1,000	...	...	...	...
Fish oils	...	...	...	1,000	...	...

Activity: Atmospheric programs
Subactivity: Public warning and forecast services

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Observations..................................	1,227	$108,798	1,248	$87,260	1,159	$83,654	1,141	$81,273	-18	-$2,381
	(1,280)	(109,333)	(1,324)	(88,892)	(1,236)	(83,674)	(1,220)	(81,293)	(-16)	
Communications................................	62	9,466	81	9,122	77	9,054	76	9,020	-1	-34
	(65)	(10,365)	(86)	(9,122)	(82)	(9,054)	(81)	(9,020)	(-1)	
Maintenance and repair........................	585	37,603	522	37,237	439	36,789	434	36,588	-5	-201
	(610)	(37,532)	(553)	(37,296)	(470)	(36,795)	(466)	(36,594)	(-4)	
Public warning and forecast preparation......	1,052	73,180	873	73,195	802	73,273	723	67,518	-79	-5,755
	(1,097)	(72,775)	(923)	(74,179)	(857)	(73,293)	(782)	(67,538)	(-75)	
Dissemination.................................	552	35,694	592	34,820	589	34,843	567	33,805	-22	-1,038
	(575)	(35,795)	(626)	(35,174)	(623)	(34,843)	(604)	(33,805)	(-19)	
National prediction centers...................	339	31,586	403	30,237	400	30,281	400	30,281	...	...
	(353)	(31,674)	(427)	(30,237)	(424)	(30,281)	(424)	(30,281)	(...)	
Public warning and forecast systems*.........	...	...	35	18,366	10	5,500	10	16,000	...	+10,500
	(...)	(...)	(35)	(18,366)	(10)	(5,500)	(10)	(16,000)	(...)	
Total requirements............................	3,817	296,327	3,754	290,237	3,476	273,394	3,351	274,485	-125	+1,091
	(3,980)	(297,474)	(3,974)	(293,266)	(3,702)	(273,440)	(3,587)	(274,531)	(-115)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

*In FY 1987, a request of $47,500,000 for NEXRAD (an increase of $34,635,000) is transferred to NOAA's Aviation Weather Services Program Trust Fund account, reflecting the decision to derive resources from the Airport and Airway Trust Fund. (See page NOAA-176).

Goals and Objectives

Goals: To provide timely and accurate meteorological, hydrologic, and oceanographic warnings, forecasts, and planning information to ensure the safety of the population, mitigate property losses, and improve the economic efficiency of the Nation.

Objectives: To improve the timeliness and accuracy of meteorological, hydrologic, and oceanographic services by developing new techniques and procedures, applying new technology, and improving methods of disseminating information to reach more people promptly in warning situations.

Base Program

NOAA provides meteorological, hydrologic, and oceanographic warnings and forecasts through its nationwide network of Weather Service Forecast Offices (WSFOs), Weather Service Offices (WSOs), River Forecast Centers (RFCs), and Tsunami Warning Centers. These round-the-clock services protect lives and property, help in planning work, commerce, travel, and recreation, and meet the needs of all segments of the national economy for general weather information. The warning and forecast program is supported by the continuous monitoring of the status of the atmosphere, the rivers, and the oceans. The data are collected and communicated throughout the network of offices and are used in preparing warnings and forecasts which are disseminated to the public directly by the National Weather Service (NWS) and in cooperation with the mass media. Three major guidance centers, the National Meteorological Center (NMC), the National Severe Storms Forecast Center (NSSFC), and the National Hurricane Center (NHC), computer-process and analyze the data to develop and distribute warning and forecast guidance needed by the field forecasters.

Observations -- Surface observations of temperature, atmospheric pressure, humidity, wind speed and direction, precipitation, visibility, cloud cover, and other weather elements are made with ground-based instrumentation at 238 NOAA-staffed stations, 223 contract stations, 204 automatic stations, 357 Federal Aviation Administration (FAA) stations, and 354 industry-staffed airport stations. Additional surface observations, including water temperature and ocean wave conditions, are taken by 1,600 high-seas and 200 coastal and Great Lakes cooperative observing ships; by 19 deep-ocean and 8 Great Lakes moored data buoys; and through cooperative arrangements at coastal and offshore facilities.

Along with development of new instruments to measure weather elements and improved versions of existing equipment, NOAA conducts engineering and development projects to improve measurement capabilities and reliability of buoys, reduce the cost of buoy operations, and maintain compatibility with changing elements of the overall observation system. NOAA will operate advanced automatic weather observation platforms at [illegible]0 fixed coastal locations.

Atmospheric soundings are taken from the surface to about 100,000 feet (30 km) at 94 NWS stations, using balloon-borne instruments, to provide vertical and horizontal distribution of temperature, pressure, humidity, and wind. Observations of temperature and precipitation are provided on a daily basis at 12,000 cooperative stations, including hydrologic observations at 6,000 locations; and snowpack water equivalent assessment on major river basins in the north-central plains through the aerial gamma radiation program. In addition, 500 Automatic Hydrologic Observing Systems are interrogated by computers over the telephone or via the GOES satellite.

A network of 56 long-range radars, supplemented by 73 local warning radars, provides round-the-clock surveillance of meteorological phenomena capable of causing natural disasters. These weather radars are the principal means of detecting and tracking severe thunderstorms and tornadoes and for measuring the heavy rains that cause flash floods.

Communications -- A complex network of leased and government-owned communications facilities and equipment provides for the collection and distribution of data used in NOAA weather and flood warning and forecast services. NOAA uses the facilities of other Federal agencies to collect and distribute a significant portion of this meteorological information. For example, the FAA provides the two major teletypewriter networks used in collecting and disseminating domestic weather data. DOD and United States Coast Guard circuits are also used for collecting meteorological data. NOAA also operates a number of facsimile circuits which are the principal method of distribution, in graphic form, of the guidance products prepared at the NMC located at Suitland, Maryland. The National Facsimile System distributes NMC graphic materials to NOAA field offices, DOD and other government users, and public users. Charts include observational data, analyses, and forecasts necessary for the general forecasting program and the preparation of hazardous weather warnings. The Digital Facsimile System distributes specialized guidance material prepared by NMC for WSFOs. Portions of the communications circuits are being phased down as Automation of Field Operations and Services (AFOS) assumes these functions. The Tropical Regional Analysis Facsimile System distributes analyses and charts for hurricane forecast centers along the Atlantic and Gulf Coast states. The Geostationary Operational Environmental Satellite Facsimile (GOESFAX) system distributes high-resolution satellite pictures to the WSFOs and transmits hydrological reports of other agencies, such as the Corps of Engineers and Geological Survey, which are used by the NWS River Forecast Centers. A Radar Facsimile System collects and distributes weather data obtained from Air Route Traffic Control Center radars to a number of WSOs in mountainous western regions. In addition to NOAA offices, other government agencies, airlines, and public and private subscribers are served by all these systems.

Weather conditions in the United States are influenced by conditions around the entire globe. As a basis for warnings and forecasts beyond 24 hours, the World Weather Watch Global Telecommunications System (GTS) provides a cooperative international program for exchanging observational data through a system of communications circuits, including landline, satellite, and radio facilities. Circuits serving the World Meteorological Center in Washington, D.C. collect data from the Far East through Tokyo, Japan; from Europe through Bracknell, England; from Canada through Toronto; and from South and Central America and the Caribbean through terminals in Brazil, Argentina, Cuba, and other islands of the Caribbean, Mexico, and nations of Central America.

Maintenance and repair -- NOAA provides engineering services for the construction, alteration, improvement, and maintenance of government-owned facilities and for the installation of meteorological and hydrological equipment. Presently, NWS operates 3 national centers, 52 WSFOs, 13 RFCs, 230 WSOs, and various observatories. The facilities maintained include offices, balloon inflation shelters, radomes, towers, standby-power generators, and 62 government housing units in remote areas in Alaska and the Pacific.

NOAA also provides engineering services for maintaining and repairing all field meteorological and hydrological equipment used in prediction and warning activities. The equipment inventory includes over 13,000 individual systems, including: (1) surface-level observing instruments such as automatic observing stations, ceilometers, hygrothermometers, solar-radiation measuring devices, and wind-measuring equipment; (2) upper air observing equipment such as radiotheodolites, theodolites, and minicomputers; (3) network and local use weather radars and radar remote sensing equipment; (4) AFOS equipment, satellite picture receivers, weather map facsimile equipment, NOAA Weather Radio VHF-FM transmitters, and mobile equipment for fire weather service support; and (5) hydrological equipment such as river and precipitation gauges, flash flood alarms, and satellite telemetry stations for river and rainfall data. NOAA conducts a systematic program to replace outdated and defective field equipment which supports data acquisition and communications activities and has a unit replacement cost under $35,000 (e.g., ceilometers, temperature and dewpoint equipment, wind measuring systems, rain and river gauges, and pressure measuring equipment).

Public warning and forecast preparation -- WSFOs are responsible for warnings and zone forecasts for states, or large portions of states, and extended weather outlooks for periods up to 10 days. WSOs are responsible for warnings and locally adapted forecasts based on the WSFO zone forecasts. Each WSFO and most WSOs prepare severe weather and flash flood warnings and advisories for a designated area. Thirteen RFCs provide river stage, crest, and flood forecasts for some 3,100 locations in all states except Hawaii. The Centers use computers to produce river and flood forecasts and hydrologic guidance to Weather Service offices for: flash floods; extended outlooks for river basins, including volume of flow, ice formation and breakup; and seasonal water supply estimates. Computerized river forecast models are being calibrated to improve hydrologic information.

Satellite Field Service Stations (SFSS's) analyze and interpret cloud and earth surface images and associated products from geostationary and polar-orbiting satellites. These stations receive high-resolution satellite images every 30 minutes, 24 hours-per-day. These images are used to prepare aviation forecasts, short-term forecasts and warnings of severe local storms and tornadoes, and hurricane advisories and gale warnings.

NWS provides warnings of severe storms and other marine hazards, such as sea ice, to ensure safe marine operations in the Great Lakes, coastal waters, designated offshore areas, and the high seas. Four Ocean Service Units (OSUs), located within the WSFOs at Seattle, Washington; Slidell, Louisiana; Washington, D.C.; and Anchorage, Alaska, provide warnings and forecasts for designated coastal and offshore areas. Warnings and forecasts for the remainder of the coastal and Great Lakes areas are provided by specifically designated WSFOs and WSOs. The Pacific Tsunami Warning Center at Ewa Beach, Hawaii, and the Alaska Tsunami Warning Center at Palmer, Alaska, monitor seismic conditions that can produce sea waves which can inundate island and coastal communities, and issue watches and warnings of potential danger to state, Federal, and international officials.

To protect our forests and rangeland from wildfires, NWS provides detailed forecasts of air temperature, wind speed and direction, humidity, timber moisture, precipitation, and thunderstorm activity to wildfire control agencies and other forestry personnel. Fire weather services primarily consist of daily forecasts for fire danger rating computations, spot forecasts, and on-site mobile unit support for prescribed burns and wildfires for the protection of life and property within the National parkland and forest system. Warnings of conditions leading to unusually high fire danger are issued as needed.

NWS also provides the Nation with agricultural weather services, including observations, forecasts, warnings, and advisories to increase farm production, improve agricultural efficiency, conserve energy, and protect the environment. As part of the agricultural weather services, NWS issues warnings of low temperatures injurious to winter and spring crops, particularly in citrus and deciduous fruit-growing areas.

NOAA has implemented the AFOS system in field operations nationwide, replacing outmoded communications, teletypewriters, and facsimile equipment with modern minicomputer-supported equipment at about 200 field offices to reduce NOAA's response time between detecting hazardous phenomena and issuing warnings to the public. Stations that do not have AFOS are being equipped to permit them to interface with the AFOS system.

Dissemination -- NOAA uses a wide range of dissemination systems, including NOAA Weather Radio (NWR), NOAA Weather Wire Service (NWWS), and telephones to distribute severe weather and flood warnings, forecasts, and other meteorological, hydrological, and oceanographic data to the public, disaster agencies, news media, industry, and other government agencies. These dissemination systems are needed for prompt delivery of warnings and forecasts so the public can take actions to preserve life and property. In the case of NWR, 374 VHF broadcast stations provide continuous broadcasts directly to the public. NWWS provides prompt delivery of warnings, forecasts, and other information to the mass media for relay to the public by way of commercial radio, television, and large-volume telephone recordings.

National prediction centers -- The NMC in Suitland, Maryland; the NHC in Miami, Florida; and the NSSFC in Kansas City, Missouri, provide the basic forecast guidance used by field forecast offices to issue warnings and forecasts of severe weather and floods. The NMC collects, processes, and analyzes global weather data four times daily, using numerical models of the atmosphere and large-scale computers, to predict weather conditions out to 10 days. NMC also prepares monthly and seasonal forecasts for average weather conditions, performs climate analysis and projection, and provides climate information services for assessing the effects of weather on food and fiber production. As part of the analysis and forecast activities, the NMC develops improved products used by field offices as a basis for warnings and forecasts to the public.

The NHC tracks and predicts the movement and intensity of hurricanes and coordinates the issuance of hurricane warnings with NMC and Hurricane Warning Offices at Boston, Massachusetts; Washington, D.C.; New Orleans, Louisiana; and San Juan, Puerto Rico. NMC and NHC develop improved techniques for predicting formation, motion, and intensity of hurricanes.

The NSSFC issues severe thunderstorm and tornado watches to local forecast offices where severe weather is likely. The local offices, in turn, issue warnings based on actual sightings of tornadoes or radar signatures. The Techniques Development Unit at NSSFC develops procedures to improve the forecasting of severe thunderstorms and tornadoes.

Public warning and forecast systems -- This line item includes the development and acquisition of all new major systems for the NWS. As each system becomes operational, its recurring operations and maintenance costs will be shown in one of the line items above. Required replacement of obsolete equipment and recent technological developments offer opportunities for NWS to improve warnings and forecasts, particularly of severe weather and floods. Technological developments for modernizing NWS in the next decade include: Automated Surface Observing Systems (ASOS); Next Generation Weather Radar (NEXRAD) with Doppler capability to provide modern, nationwide coverage for detecting severe weather and floods; and an Advanced Weather Interactive Processing System (AWIPS) to combine, process, integrate, and transmit high-volume radar, satellite, upper air, and surface observation data. The main purpose of AWIPS is to enable forecasters to display and manipulate these observational data sets, which will help improve weather predictions. The new technologies will also reduce labor-intensive observation procedures and improve communications and processing of observational data and forecast products.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Observations			
Percent of surface observations accuracy	99	99	99
Percent of automatic weather station availability	98	98	98
Percent of upper air data availability	98	98	98
Upper air observation errors (weighted/100 obs)	1.2	3.0	3.0
Percent of upper air ground equipment availability	97	96	96
Percent of radar data availability	96	92	92

	1985 Actual	1986 Estimate	1987 Estimate
Percent of radar equipment availability:			
WSR-74S	95	92	92
WSR-74C	97	94	94
WSR-57	92	92	88
Percent of data availability from moored buoys:			
Meteorological observations	90	90	85
Wave measurements	84	84	80
Percent of data availability from Coastal-Marine Automated Network (C-MAN)	85	85	85
Communications			
Facsimile charts transmitted daily	869	869	869
Percentage of charts transmitted within 2 hours of availability	94	94	94
Maintenance and Repair			
Percent of major equipment availability	98	98	98
Percent of NWS stations with full standby power	81	81	81
Percent of NWS facilities meeting operational adequacy criteria	80	80	80
Public Warning and Forecast Preparation			
Percent of AFOS equipment availability	98	98	98
Dissemination			
Percent of NOAA Weather Radio and/or powered translators continuously on air	99	99	99
National Prediction Centers			
Percent of successful Limited Forecast Model (LFM) Runs	98	98	98
Percent of successful surface analyses	100	100	100
Percent of successful radar charts	99	99	99

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Observations	1,159 (1,236)	$83,654	1,141 (1,220)	$81,273	-18 (-16)	-$2,381

NOAA can achieve savings of 18 positions and $2,381,000 by: reducing staff at 8 Weather Service Forecast Offices (WSFO's); closing the NWS Southern Region Headquarters in Fort Worth, Texas and transferring its responsibilities to the Eastern and Central Region Headquarters; reducing services at the NOAA Data Buoy Center (NDBC); funding Micronesian weather services through reimbursement by the Department of the Interior in accord with the Compact of Free Association Act of 1985, P.L. 99-239; and discontinuing the moored buoy network around Hawaii.

Four positions and $96,000 are part of overall savings of 35 positions and $836,000 for reducing staff at 8 Weather Service Forecast Offices (WSFO's). This reduction will not affect station hours of operation. Locations of the 8 WSFO's are:

Juneau, Alaska
Albany, New York
Portland, Maine
Lubbock, Texas
San Juan, Puerto Rico
Milwaukee, Wisconsin
Cheyenne, Wyoming
Reno, Nevada

The Administration proposes to streamline NWS management by consolidating the current four-region management structure (for the lower 48 states) into a three-region structure. This will permit savings of 18 positions and $852,000, of which 14 positions and $655,000 are included in this line item. The Southern Region Headquarters in Fort Worth, Texas will be closed, and its management duties will be assumed by NWS Central Region Headquarters in Kansas City, Missouri, and the Eastern Region Headquarters in Garden City, New York. The Central and Eastern Region Headquarters staff will be augmented to ensure continued effective management of field operations.

A reduction of $456,000 reflects the Administration's decision to centralize within the Department of the Interior all financial support for Federal programs in Micronesia. In FY 1985, the United States negotiated and ratified a Compact of Free Association (P.L. 99-239) with Palau, the Marshall Islands, and Federated States of Micronesia, which will terminate requirements for Department of Commerce programs in Micronesia except for those provided by the National Weather Service. It is anticipated that, beginning in mid-FY 1986, the new relationship with the freely associated states will be managed by the Department of the Interior. Weather Services to Micronesia will not be reduced but will be funded by reimbursement from the Interior Department. This decrease, along with the FY 1986 decrease of $456,000 in NOAA's appropriation, completes the transfer of financial management responsibility to the Department of the Interior.

A proposed decrease of $574,000 (object class 25.0) will reduce NOAA Data Buoy Center (NDBC) system engineering and test capability. As a result, applications of some new technologies will be delayed. Savings of $600,000 (object class 25.0) will be achieved by discontinuing maintenance of the four low priority moored buoys surrounding Hawaii.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-1	-$14,390	Reno, NV
	-1	-26,381	San Juan, PR
	-14	-516,924	Fort Worth, TX
	-1	-26,381	Lubbock, TX
	-1	-14,390	Cheyenne, WY
Total salaries	-18	-598,466	
Other personnel compensation		-47,334	
Total compensation		-645,800	
Personnel benefits		-67,900	
Travel and transportation of persons		-12,600	
Rent, communications, and utilities		-69,200	
Printing and reproduction		-2,000	
Other services		-1,519,000	
Supplies and materials		-64,500	
Total		-2,381,000	

	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Perm. Pos.	Inc.(+) or Dec.(-) Amount
Communications	77 (82)	$9,054	76 (81)	$9,020	-1 (-1)	-$34

One position and $34,000 represents part of the overall savings of 11 positions and $407,000 available by combining managerial functions of the National Weather Service Pacific Region Headquarters and the Alaska Region Headquarters Offices. The new Pacific-Alaska Region Headquarters will be located in Anchorage, Alaska; the existing Pacific Region Headquarters Office in Honolulu, Hawaii, will be converted to a logistics support office for the southern portion of the Pacific-Alaska Region. The consolidation will streamline NWS management and support functions and does not affect technical provision of weather services.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
Total salaries	-1	-$26,381	Honolulu, HI
Personnel benefits		-6,819	
Travel and transportation of persons		-400	
Rent, communications, and utilities		-400	
Total		-34,000	

Maintenance and repair	439 (470)	$36,789	434 (466)	$36,588	-5 (-4)	-$201

Savings of 5 positions and $201,000 will result from combining the NWS Pacific and Alaska Region Headquarters and consolidating the conterminous service regions of the National Weather Service (NWS) by closing the NWS Southern Region Headquarters in Fort Worth, Texas.

Three positions and $111,000 are part of the overall savings of 11 positions and $407,000 to be accomplished by combining the Pacific and the Alaska Region Headquarters Offices of the National Weather Service. This is described above under "Communications."

Two positions and $90,000 are part of the overall savings of 18 positions and $852,000 resulting from consolidation of the four conterminous NWS regions into three managerial areas of responsibility. This consolidation is described above under "Observations."

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-3	-$81,062	Honolulu, HI
	-2	-69,218	Fort Worth, TX
Total salaries	-5	-150,280	
Other personnel compensation		-8,682	
Total compensation		-158,962	
Personnel benefits		-29,138	
Travel and transportation of persons		-6,600	
Rent, communications, and utilities		-2,800	
Printing and reproduction		-700	
Supplies and materials		-2,800	
Total		-201,000	

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Public warning and forecast preparation	802 (857)	$73,273	723 (782)	$67,518	-79 (-75)	-$5,755

NOAA can achieve savings of 79 positions and $5,755,000 by: eliminating the agricultural weather services and fruit frost programs; reducing the fire weather services program; reducing staff at 8 Weather Service Forecast Offices (WSFO's); combining the Pacific and Alaska Region Headquarters; discontinuing maintenance of the Colorado River Basin flood warning system; discontinuing upgrade of the Susquehanna River Basin flood warning system; and reducing the number of meteorological technicians. These savings are described in more detail as follows:

NOAA can achieve savings of 29 positions and $1,000,000 by eliminating the agricultural weather services program. As this service benefits a specific user group, it should be provided by private sector meteorologists rather than by the Federal Government. NWS will discontinue services that provide weather warnings, forecasts, and advisories for specific types of farming and ranching operations. However, NWS will continue to provide generalized public service weather forecasts to support agricultural operations, and funds will be retained to continue the collection of observations at key points through a mix of automatic observing equipment, contract observations, and telephone answering equipment. Agricultural Weather Service Centers (AWSC's) and WSO's which primarily provide agricultural weather services will be closed, and agricultural weather staff will be reduced as follows:

Closures Proposed

- AWSC, College Station Texas
- AWSC, Stoneville, Mississippi
- AWSC, Lafayette, Indiana
- AWSC, Auburn, Alabama
- WSO, Riverside California
- WSO, Yuma, Arizona
- WSO, Twin Falls, Idaho

Staff Reductions Proposed

- WSO, Grand Rapids, Michigan
- WSO, Brownsville, Texas
- WSO, Redding, California
- WSO, Wenatchee, Washington
- Silver Spring, Maryland
- WSFO, Salt Lake City, Utah
- WSFO, Portland, Oregon
- WSFO, Great Falls, Montana
- Camp Springs, Maryland

Savings of eight positions and $418,000 will result from eliminating the specialized agricultural fruit frost program. NWS will discontinue specialized frost and freeze warnings and advisories for fruit and vegetable growers in California, Florida, and Texas, as these special services to profitmaking groups should be provided by the private sector rather than at taxpayer expense. However, general public frost forecasts will continue to be available to growers to aid in making crop-related decisions. Elimination of more detailed services will result in position savings at the following WSO's:

Bakersfield, California
Santa Maria, California
Riverside, California
Tampa Bay, Florida
Brownsville, Texas

NOAA is proposing a decrease of eight positions and $300,000 in the fire weather services program. NOAA will discontinue forestry management services, including advisories for controlled burning, pest management, and reforestation, on non-Federal lands. However, NWS will continue support for very large, very dangerous wildfires; and will continue forestry management activities on Federal lands.

Of the requested decrease, 17 positions and $432,000 represents part of the overall savings of 35 positions and $836,000 for staff reductions at 8 WSFO's. The overall decrease is described above under "Observations."

Of the total decrease, one position and $39,000 represents part of an overall reduction of 11 positions and $407,000 to be accomplished by combining the National Weather Service Pacific and Alaska Region Headquarters offices. This consolidation is described above under "Communications."

Of the requested decrease, savings of $650,000 will be achieved by eliminating maintenance funding for the Colorado River Basin flood warning system. NWS will continue base work on improving streamflow prediction models.

Of the requested decrease, $2,340,000 (object class 31.0) represents elimination of a FY 1986 Congressional add-on appropriation for upgrade of the Susquehanna River Basin flood warning system. The FY 1986 add-on funds will provide adequate improvements in the flood warning system.

The remaining savings of 16 positions and $576,000 can be achieved by reducing meteorological technician staffing at NWS weather offices. Meteorological technicians do not prepare zone, aviation, or marine forecast amendments for severe weather. Therefore, this reduction will not adversely affect key services.

The position and object class detail for this decrease follows:

Number	Annual Salary Decrease	Location
-3	-$50,706	Juneau, AK
-2	-100,837	Auburn, AL
-2	-63,238	Yuma, AZ
-1	-26,381	Eureka, CA
-1	-26,381	Fresno, CA
-1	-21,714	Oakland, CA
-1	-31,619	Redding, CA
-7	-211,689	Riverside, CA
-1	-26,411	Bridgeport, CT
-1	-19,606	Miami, FL
-3	-79,750	Tampa, FL
-1	-26,381	Macon, GA
-1	-26,381	Honolulu, HI

	Number	Annual Salary Decrease	Location
	-1	-$29,018	Waterloo, IA
	-1	-31,619	Boise, ID
	-1	-31,619	Twin Falls, ID
	-1	-29,018	Springfield, IL
	-5	-158,837	West Lafayette, IN
	-1	-29,018	Baltimore, MD
	-5	-136,631	Camp Springs, MD
	-3	-90,361	Silver Spring, MD
	-3	-52,490	Portland, ME
	-2	-57,614	Stoneville, MS
	-1	-26,381	Grand Rapids, MI
	-1	-31,619	Great Falls, MT
	-1	-23,985	Havre, MT
	-1	-26,411	Lincoln, NE
	-1	-29,018	Albuquerque, NM
	-3	-50,038	Reno, NV
	-1	-26,381	Albany, NY
	-1	-19,606	Burns, OR
	-1	-31,619	Portland, OR
	-1	-29,018	Charleston, SC
	-1	-26,381	Rapid City, SD
	-1	-29,018	Nashville, TN
	-1	-21,714	Amarillo, TX
	-3	-64,971	Brownsville, TX
	-4	-105,060	College Station, TX
	-1	-26,381	Lubbock, TX
	-1	-26,381	Salt Lake City, UT
	-1	-31,619	Wenatchee, WA
	-2	-39,628	Milwaukee, WI
	-4	-64,930	Cheyenne, WY
Total salaries	-79	-2,087,478	
Other personnel compensation		-46,996	
Total compensation		-2,134,474	
Personnel benefits		-273,830	
Travel and transportation of persons		-105,900	
Transportation of things		-35,800	
Rent, communications, and utilities		-109,700	
Other services		-649,696	
Supplies and materials		-105,600	
Equipment		-2,340,000	
Total		-5,755,000	

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Dissemination	589 (623)	$34,843	567 (604)	$33,805	-22 (-19)	-$1,038

Savings of 22 positions and $1,038,000 will be achieved by: reducing staff at 8 Weather Service Forecast Offices (WSFO's); consolidating the conterminous regions of the National Weather Service (NWS) by closing the NWS Southern Region Headquarters in Fort Worth, Texas; combining management activities in the Pacific and Alaska Regions; and reducing installation of emergency power at lower priority WSOs. These savings are described in more detail as follows:

Savings of 14 positions and $308,000 are part of the total savings of 35 positions and $836,000 at 8 WSFO's. This reduction is described above under "Observations."

Two positions and $107,000 represent part of the overall savings of 18 positions and $852,000 associated with consolidating the four conterminous NWS regions into three managerial areas of responsibility. This consolidation is described above under "Observations."

Six positions and $223,000 are part of 11 positions and $407,000 to be saved by combining the National Weather Service Pacific Region Headquarters and the Alaska Region Headquarters Offices. This consolidation is described above under "Communications."

Savings of $400,000 (object class 31.0) will be attained through elimination of a FY 1985 Congressional add-on appropriation to fund installation of emergency power at Weather Service Forecast Offices with NOAA Weather Radio broadcast responsibility. In order to improve overall public weather services, implementation of technological advancements must be assigned precedence over lower priority facilities upgrades.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-1	-$17,824	Juneau, AK
	-6	-187,553	Honolulu, HI
	-2	-43,608	Portland, ME
	-2	-27,252	Reno, NV
	-4	-62,906	Albany, NY
	-2	-89,861	Fort Worth, TX
	-2	-35,648	Lubbock, TX
	-3	-38,586	Milwaukee, WI
Total salaries	-22	-503,238	
Other personnel compensation		-59,515	
Total compensation		-562,753	
Personnel benefits		-75,247	
Equipment		-400,000	
Total		-1,038,000	

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Public warning and forecast systems	10 (10)	$5,500	10 (10)	$16,000	... (...)	+$10,500

Beginning in FY 1987, the NEXRAD Program will be financed at a total level of $47,500,000 through the FAA Airport and Airway Trust Fund. Budget authority, obligations, and the program description are discussed in more detail under the Aviation Weather Services Program Trust Fund. (See page NOAA-176).

NOAA proposes an increase of $5,860,000 to continue the Advanced Weather Interactive Processing System (AWIPS) Program. In FY 1987, NWS will continue competitive system designs contracted in FY 1986, complete the implementation of front-end communications processors at forecast offices to begin the transition from AFOS to the AWIPS operational era; continue development of the advanced communications architecture needed to support the exchange and distribution of increased radar, satellite, surface, and upper air data and enhanced central guidance, forecast, and warning products; perform risk analyses and testing of prototype advanced system elements; and begin planning the transition from AFOS to AWIPS.

NOAA requests an increase of $4,640,000 to continue the Automation of Surface Observing Systems (ASOS) program as follows: integrate the results of the FY 1985 and FY 1986 Demonstration Phase into the final system design; initiate the Production System Acquisition Phase through a contract for design, fabrication and testing of production units; and continue production of the next-generation laser ceilometers.

The proposed AWIPS-90 system is needed to replace aging elements of the Automation of Field Operations and Services (AFOS) system in the early 1990's, and to implement recently proven techniques and technologies for improving warnings and forecasts of severe local weather. ASOS, under development since 1981, will relieve field personnel from many time-consuming manual observation responsibilities, and will increase flexibility and efficiency in future NWS staffing and service consolidations. ASOS is a key element of the Joint Automated Weather Observing Program (JAWOP), a collaborative effort by the Departments of Commerce, Defense, and Transportation.

Additional funding will be required in future years as follows:

	(dollars in thousands)				
	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
Radar System Upgrade*	$47,500	$58,500	$90,800	$81,100	$55,700
AWIPS/ASOS	16,000	30,000	40,000	48,000	50,700
TOTAL	63,500	88,500	130,800	129,100	106,400

*Budget resources are included in NOAA's Aviation Weather Services Program Trust Fund (see page NOAA-176).

The object class detail for this increase follows:	Annual Amount
Travel and transportation of persons	+$81,000
Transportation of things	+10,000
Other services	+4,594,000
Supplies and materials	+75,000
Equipment	+5,740,000
Total	+10,500,000

Additional Resource Information

Resources for sub-line item detail are reflected below:

	1985 Actual		1986 Currently Available		1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Observations						
Data buoy activities	35	$11,110	35	$11,410	35	$10,236
Public warning and forecast preparation [1/]						
Agriculture weather	41	1,418	41	1,418	...	...
Fire weather	46	1,636	46	1,636	38	1,336
Marine weather	80	3,627	80	3,627	80	3,627
Seismic sea wave warning	18	1,007	18	1,007	18	1,007
Dissemination						
NWR	40	5,452	40	5,050	40	4,650
NWWS	141	7,258	141	6,733	141	6,733
Public warning and forecast systems						
Radar System Upgrade	25	19,750	25	12,866	(28)	(47,500) [2/]
Automation of surface observations/Advanced Weather Interactive Processing System	10	3,000	10	5,500	10	16,000

[1/] Beginning in FY 1984, FAA was authorized to transfer funding to NWS for aviation weather services from the Airport and Airway Trust Fund.

[2/] Beginning in FY 1987, NWS contributions to the NEXRAD Program will be financed by the FAA-administered Airport and Airway Trust Fund.

Activity: Atmospheric programs
Subactivity: Atmospheric and hydrological research

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Meteorological research	343	$37,959	371	$39,712	361	$39,314	362	$33,974	+1	-$5,340
	(358)	(37,719)	(391)	(39,742)	(381)	(39,339)	(383)	(33,999)	(+2)	
Atmospheric climate research	94	10,584	74	9,785	71	9,789	71	8,789	...	-1,000
	(98)	(10,732)	(78)	(9,805)	(75)	(9,789)	(75)	(8,789)	(...)	
Air quality research	85	10,592	115	10,739	112	10,783	117	11,783	+5	+1,000
	(89)	(10,498)	(121)	(10,739)	(118)	(10,783)	(123)	(11,783)	(+5)	
Solar-terrestrial services and research	71	4,940	76	4,955	72	4,910	72	4,610	...	-300
	(74)	(4,894)	(80)	(4,955)	(76)	(4,910)	(76)	(4,610)	...	
National climate program	10	1,146	9	1,946	9	1,948	9	1,148	...	-800
	(10)	(1,097)	(9)	(1,946)	(9)	(1,948)	(9)	(1,148)	(...)	
Total requirements	603	65,221	645	67,137	625	66,744	631	60,304	+6	-6,440
	(629)	(64,940)	(679)	(67,187)	(659)	(66,769)	(666)	(60,329)	(+7)	

Note: Permanent position amounts in parenthesis represent workyears, and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To increase our knowledge and understanding of atmospheric and hydrologic processes and conditions, both natural and anthropogenic, as the basis for improved short-term and long-term predictions of environmental changes.

Objectives: To develop ground-based and satellite techniques for the remote sensing of critical meteorological and oceanographic parameters by optical, infrared, radio, and acoustic instrumentation; to test and evaluate systems designed for improving weather information and forecasts; and to improve detection and prediction of severe storms.

To obtain a better understanding of the physical nature of the atmosphere and the basis of atmospheric fluctuations by conducting regional and global experiments to acquire, process, and analyze data for use in developing physical and mathematical models for improving time, range, and accuracy of weather, air quality, and climate forecasts.

To measure, monitor, and predict air quality through development of new measurement techniques, national and global networks, and models of transport and chemistry of atmospheric pollutants and to provide a data base for assessing the impact of key pollutants on climate.

To provide forecasts and warnings of solar disturbances and their effects on the earth's atmosphere.

To implement the National Climate Act (P.L. 96-367), through the National Climate Program Office (NCPO), by maintaining and updating the 5-year plan; evaluating and coordinating Federal, state, and regional efforts in climate-related activities; and preparing an annual report to Congress.

Base Program

NOAA's atmospheric and hydrological research program is an integrated program of research, fundamental technology development, and services. It includes a broad spectrum of activities, encompassing the lower and upper atmosphere, the hydrosphere, and the solar-terrestrial environment. Ground-based and satellite techniques for remote measurements of critical meteorological, hydrological, and oceanographic variables are being developed for use by research and service programs. New methods of remote sensing, using selected electromagnetic wavelengths and acoustic waves are being designed, tested, and evaluated. A system for integrating new and existing observational, data processing and display, communications, modeling, and dissemination techniques is being tested and evaluated for use by NWS to improve weather forecasts for major urban centers. Research is conducted to increase understanding of hurricanes, tornadoes, and other severe storms and related phenomena to improve methods for predicting their occurrence, intensity, and, in the case of hurricanes, landfall. Fundamental investigations are being conducted to expand scientific understanding of the physical processes which govern the behavior of the atmosphere and the ocean as complex fluid systems. These fluid systems are in turn being modeled mathematically and studied by computer simulation methods to better understand the general circulation of the atmosphere; the structure, variability, and predictability of global and regional climate; the predictability of large- and small-scale weather; and the conceptual description and prediction of long- and short-term hydrological processes. NOAA participated in the First GARP Global Experiment, an international observational experiment to acquire, archive, and study the data necessary to understand smaller scales of motion and their impact on the larger scale global circulation. Research is conducted to monitor and better understand the physical processes which control climate and its variations continues, with emphasis on radiatively important atmospheric constituents, clouds and radiation, climate modeling and diagnostics, and the effects of man's activities on climate and water resources. NOAA also conducts research to assess the impact of manmade pollutants on air and precipitation quality and the geophysical and climatic consequences of air quality alterations by man or nature. NOAA's managers and researchers are contributing substantially to the National Acid Precipitation Assessment Program. Forecasts and warnings of solar disturbances and their effects on the Earth's atmosphere are prepared and issued to civil and military users with systems or activities sensitive to solar disturbances, such as public utilities, transportation, satellite operations, space research, and defense. NOAA also provides staff support for the National Climate Program Office.

Meteorological research -- NOAA's meteorological research is composed of two main components: Observational systems research and forecasting research.

Through observational systems research, NOAA seeks to develop ground-based and satellite techniques for the remote measurement of critical meteorological, hydrological, and oceanographic parameters required by research and service programs. Remote sensing techniques have advantages over instruments now in use which measure the atmosphere only at the point of instrument location. Typically, ground-based remote sensing from a single location: (1) provides simultaneous measurements of parameters important to weather at many points throughout a large volume; (2) provides data continuously rather than intermittently; (3) functions without costly telemetry networks; and (4) provides for highly automated operations, requiring fewer operational staff than conventional observation techniques. Considerable success has been achieved in establishing the feasibility of remote sensing of the atmosphere using acoustic, radio, and optical signals. Ground-based techniques are being developed to measure and display vertical profiles and cross-sections of atmospheric parameters, and satellite techniques are being developed to measure vertical and spatial distribution of various parameters. The Wave Propagation Laboratory (WPL) is developing vertical profiling systems to remotely and continuously measure vertical profiles of wind velocity, temperature, humidity, and total water content. Specifications for a wind Profiler to be built on contract by industry and techniques to process and integrate data from networks of wind profilers to provide four-dimensional mesoscale winds for operational and research uses were developed, and acquisition of an operational test array of 30 wind Profilers has begun. Satellite-based techniques are being developed to measure areal distribution of precipitation. The Boulder Atmospheric Observatory (BAO) operates a tall (300 meters) meteorological research tower to provide demonstration, evaluation, and calibration of remote sensing instruments in support of research and service applications and to conduct new research on atmospheric processes such as convection, clouds, precipitation, turbulence, low-level wind shear, and the transport and diffusion of pollutants.

Forecasting research covers many areas of investigation including: cloud processes, small-scale severe weather, precipitation, the Program for Regional Observing and Forecasting Services (PROFS), the Federal/State cooperative weather modification program, and mathematical modeling. These efforts seek to improve our ability to provide forecasts and warnings of both large- and small-scale weather disturbances.

Cloud processes research includes the study of hurricanes, tornadoes, and severe convective storms that pose a significant threat to life and property. NOAA conducts continuing research to increase the understanding of these severe storms and to improve methods of detecting their location and predicting their future movement and intensity. Data collected through routine weather observations and by specially instrumented aircraft and satellites are analyzed and compared to numerical models in order to simulate the conditions under which storms occur. The Atlantic Oceanographic and Meteorological Laboratory (AOML), located in Miami, Florida, develops hurricane models and conducts analyses based on data sets collected during their annual field program, primarily using sensors aboard NOAA aircraft. Basic insight is then obtained into the nature and structure of tropical disturbances which, in turn, provides a means for improving forecasts and lessening the losses caused by these storms. One such example of this research is the Hurricane STRIKE program which was begun in FY 1980. The program employs two WP-3D aircraft and ground-based radar to provide real-time monitoring of short-term changes in the path and intensity of hurricanes nearing landfall. This information is used for current storm forecasting and for developing techniques to improve hurricane prediction and warning skills, including forecasts of storm surge, landfall, winds, and flooding. The National Severe Storms Laboratory (NSSL), located in Norman, Oklahoma, conducts research: (1) to increase the understanding of tornadoes, squall lines, thunderstorms, and other severe local storms; (2) to improve methods for prediction and early detection of these storms; (3) to reduce the areas warned unnecessarily; and (4) to increase warning leadtime for protection of life and property. The structure and dynamics of severe storms are studied in Oklahoma, a region of high tornado frequency, using a closely spaced network of automatic observing stations, an instrumented tower, serial releases of rawinsondes, conventional and dual Doppler weather radars, and meteorologically instrumented aircraft, to determine specific characteristics of these storms and to provide an improved basis for forecasting their occurrence. Advanced techniques are being developed for improved probing of the atmosphere by conventional and dual Doppler radars and for processing, displaying, and transmitting the information obtained by radar.

Small-scale severe weather research focuses on computer forecasting of weather elements, hydrologic forecast models, and methods to quickly detect and predict small-scale, short-fused hazardous weather events. Increased emphasis is being placed on severe weather research to substantially improve forecasts of extreme precipitation events, such as flash floods and paralyzing snowfalls, and accompanying phenomena including hail, high winds, gust fronts, tornadoes, lightning, poor visibility, and icing. Specifically, NOAA works to: (1) upgrade current NMC operational weather forecasting models to incorporate new understanding of the processes responsible for severe weather; (2) evaluate and extend the use of new satellite and ground-based remote sensors for severe weather diagnostics; and (3) train field forecasters in up-to-date techniques of mesoanalysis and prediction.

Precipitation research is focused on understanding: (1) convective weather systems, including mesoscale convective complexes; (2) cloud precipitation processes; and (3) severe storm precursors. The objective is to increase the lead-time for NWS alerts and warnings and to support PROFS program objectives in improving forecasts, especially of severe weather.

The objective of the PROFS program is to improve short-range severe weather warnings, alerts, and forecasts by introducing new technologies into the operational weather service system. Thus, PROFS is: (1) testing and evaluating technologies and research to determine which could have the greatest impact on short-term weather and hydrological forecast improvements, (2) assisting the NWS to identify performance requirements for implementing these improved systems in field forecast offices, and (3) developing both data sets and techniques to improve the 2- to 12-hour forecasting of severe weather events. Systems being tested include Doppler radar, Profiler vertical soundings, Automation of Field Operations and Services (AFOS), satellite data sets, display techniques, and improved mesoscale models.

The North Dakota/Utah/Nevada/Illinois weather modification program is a Federal/State cooperative effort. NOAA provides financial support in the form of grants, technical support, coordination and specialized equipment for state-sponsored research efforts to increase precipitation through cloud seeding and to better understand cloud physics.

The Geophysical Fluid Dynamics Laboratory (GFDL), in Princeton, New Jersey, conducts a major research program aimed at understanding the physical laws governing the behavior of the Earth's ocean-atmosphere system to continue improvements in weather forecasting. Through the use of advanced digital computers, mathematical models are developed to simulate the behavior of tropical cyclones, turbulence, and mesoscale atmospheric phenomena. This research makes use of regional, synoptic, and global data provided by weather satellites and by programs such as the Global Atmospheric Research Program, the Global Weather Experiment, and the Severe Environmental Storms and Mesoscale Experiment. Constructing physically precise models of the Earth's ocean-atmosphere system, GFDL will be able to simulate the behavior of geophysical phenomena reaching from the surface of the Earth up to the mesosphere and extending from short-term events affecting a single city to long-range weather forecasts affecting large areas.

Atmospheric climate research -- The purpose of NOAA's atmospheric climate research program is to achieve a better understanding of the physical processes which control climate and its variation, leading to the ability to forecast interannual climatic changes and long-term trends. Atmospheric climate research has become particularly important as the expanded use of technology introduces increasing amounts of chemicals into the atmosphere which have the potential to significantly alter global weather and climate. It is essential to determine the degree to which man-produced effluents influence climate so that there is a rational basis for regulation of industrial activity. The major elements of the program include monitoring and observation, climate modeling and assessment, and world climate research through the Global Atmospheric Research Program.

Monitoring and observation encompasses the Geophysical Monitoring for Climatic Change (GMCC) and a solar-radiation program. The GMCC program currently has three facets: (1) to measure, at four baseline stations in remote parts of the world relatively unaffected by man's activities (South Pole, Alaska, Hawaii, and Samoa), the background concentrations of atmospheric constituents (CO_2, ozone, water vapor, halocarbons) that produce a "greenhouse" warming effect on the atmosphere; (2) to measure the concentrations of some of the more significant trace constituents (primarily CO_2) at other, less remote stations which may be affected by man's activities; and (3) to conduct analysis and interpretation of these data. The purpose is to gather information relating to the long-term climatic effects of man-induced and natural changes in the concentrations of trace constituents in the atmosphere. The solar-radiation program conducts observations of solar variability in the ultraviolet, optical, and infrared spectra. Solar radiation is the source of the energy driving the ocean-atmosphere circulations. This knowledge is essential to an understanding of climatic variability and trends.

Climate modeling and assessment are geared essentially toward the development of numerical climate models which utilize the data and analyses produced by other climate research activity. These models seek to determine the sensitivity of air and ocean systems to changes in solar radiation and atmospheric conditions and, ultimately, to predict climate variations.

The Global Atmospheric Research Program (GARP) encompasses the World Climate Research Program (WCRP) and the First GARP Global Experiment (FGGE). Both programs are international in scope, jointly coordinated by the World Meteorological Organization and the International Council of Scientific Unions. NOAA is the lead agency for GARP activities within the U.S. Government. WCRP concentrates on the complete climate system. The funds in this budget line item currently cover: (1) part of the International Tropical Oceans Global Atmosphere (TOGA) project, which is concerned with the ocean's role in climate (supplementing the TOGA funding under the Ocean Climate Research line item); (2) use of FGGE data sets for research on extended-range weather and climate forecasting; and (3) support for the cloud and radiation program element. The latter element centers on the recently initiated International Satellite Cloud Climatology Program (ISCCP), which utilizes meteorological satellite imagery data to determine the effect of clouds on the earth's radiation balance. The first step of ISCCP is to reduce the vast quantity of satellite data to a form amenable to systematic analysis to determine the distribution and extent of clouds over the globe for a period of several years. These data will be correlated with radiation and climate variability. FGGE, also known as the Global Weather Experiment, has four basic objectives: (1) to improve our understanding of atmospheric dynamics and the general circulation of the atmosphere and, hence, improve our ability to model those mechanisms responsible for that circulation; (2) to determine the theoretical and practical limits of atmospheric predictability; (3) to provide the spatial and temporal design basis for an optimal, affordable observing system for the future; and (4) to improve models of climate change by fully and accurately simulating the annual cycle as observed over FGGE's Operational Year. The formal international observing period covered 12 consecutive months, a complete seasonal cycle, from December 1978 to November 1979. This formal period was preceded by a build-up period during which the satellites of several nations and various specialized observing systems were launched and tested along with the data processing systems and models. During FY 1987, GARP base funds will be used to continue a nationally coordinated, comprehensive research program on long-range weather and short-term climate forecasting based on FGGE data.

Air quality research -- NOAA conducts air quality research to predict geophysical consequences (i.e., changes in the precipitation, visibility, radiation, etc.) of air quality alterations by man or nature. The development of new measurement techniques and physical, chemical, and dynamic models at NOAA's Air Resources and Aeronomy Laboratories will enable quantitative predictions to be made of the effects of manmade pollutants, thus permitting the Environmental Protection Agency (EPA) and other agencies responsible for the control of these pollutants to make scientifically sound regulatory decisions to reduce the adverse impacts of atmospheric emissions. Aeronomy Laboratory measurements have led to significant changes in model predictions of the effects of nitrogen oxides, fluorocarbons, and other man-made pollutants. This program complements NOAA's Global Monitoring of Climate Change Program, which monitors the compositional and radiative effects of long-term changes in the atmosphere. Air pollution research studies are conducted using laboratory experimentation and field observations from instruments on balloons and high-flying aircraft, and satellite and ground-based remote sensing techniques. NOAA's air quality research focuses on several major avenues of investigation, including monitoring and observation, dynamics and transport, and geochemical cycling.

Monitoring and observation currently include such activities as: (1) assessing changes in air quality and developing new measurement techniques as needed; (2) measuring the concentration of man-made atmospheric pollutants (such as sulfur compounds, fluorocarbons, carbon monoxide, and nitrogen oxides); (3) making global measurements of stratospheric concentrations of fluorocarbons, nitrous oxide (N_2O), methane (CH_4), nitrogen oxides, ozone, and water vapor by balloon sampling techniques; (4) using absorption spectroscopy to measure from the ground, at several geographic locations and in different seasons, some important trace constituents and catalytic agents in the atmosphere; (5) making mountain station measurements of minor atmospheric constituents in both clear and polluted air and of constituents important in acid deposition by precipitation or by aerosol transport; and (6) implementing a dry acid deposition "core" network to measure air chemistry and relevant meteorological parameters, such as ozone, sulfur dioxide, nitrogen oxide(s), wind speed, and atmospheric stability.

Atmospheric dynamics and transport research focuses on such efforts as: (1) developing techniques in the laboratory (by computer simulation) and in the field to permit the modeling of transport and chemistry of atmospheric materials; (2) predicting the trajectories of contaminated air masses in the troposphere and stratosphere; (3) conducting transport and diffusion studies for the prediction and control of atmospheric pollution from energy production; and (4) probing the vertical profile of winds and clear air turbulence in the upper atmosphere using ground-based, high-frequency radars.

Geochemical cycling research incorporates such pursuits as: (1) determining the sources of natural emissions of gases and particulates into the air; (2) determining the possible effects of atmospheric pollution, including atmospheric chemical cycles; (3) studying inadvertent alteration of precipitation quality and patterns by air pollutants, the chemical reactions among pollutant gases, and effect of aerosols and gases on radiative transfer in the atmosphere and on the heat budget at the ground; (4) measuring the rate constants for the chemical reactions involving the nitrogen cycle and fluorocarbons in the atmosphere, acid rain processes, and processes affecting tropospheric ozone as well as the ozone layer shielding the Earth from damaging solar ultraviolet radiation; and (5) developing quantitative computations of the effects of fluorocarbons and other stratospheric constituents and pollutants on the ozone in the upper atmosphere.

The above avenues of investigation are strongly interrelated and critical air quality problems need to be addressed across all three areas. NOAA is actively involved in two such high-priority national problems, namely the increase of radiatively important (or "greenhouse") trace species and acid precipitation.

The Radiatively Important Trace Species (RITS) program (also an important element of atmospheric climate research) supports research and monitoring to understand the trends, sources, sinks, and behavior of RITS gases and aerosols (such as nitrous oxides, methane, chlorofluorcarbons, and tropospheric ozone) and the climatic and chemical consequences of man's activities affecting their concentrations. Scientists believe that these trace constituents contribute to global warming of the earth's atmosphere (the so-called "greenhouse effect"). This phenomenon may, over the long-term, cause significant climatic changes, altering world rainfall and food production patterns.

Supporting NOAA's research responsibilities in the National Acid Precipitation Assessment Program, the Air Resources and Aeronomy Laboratories are: (1) developing techniques and equipment to measure dry deposition of acidic materials; (2) making measurements to understand processess of wet and dry deposition of acidic materials through establishment and maintenance of a set of research sites; (3) studying natural sources of acidic materials; and (4) measuring the transcoastal influx of natural acid rain precursors and the flux of acidic material from the northeastern sections of the United States to understand the total U.S. acid precipitation budget. These measurements will provide the basis for determining the extent of human-induced versus natural sources of acid precipitation; the extent of the acid rain phenomenon; and some of the processes involving the uptake, transport, and deposition of acid materials.

Solar-terrestrial services and research -- Forecasts and warning of sudden solar disturbances and their effects on the earth are needed to avoid failure of some aircraft and marine navigation and communications systems at high latitudes; to improve the efficiency of all telecommunications systems; to safeguard the effectiveness of national security operations; and to maintain the reliability of electric power networks and of solar disturbance-sensitive research programs. Real-time observations of the sun and the space environment are needed as a basis for forecasts and warnings. Major users of solar forecasts and warnings are public utilities, transportation systems, energy-related industries, Department of Defense, NASA, other satellite operators, and other researchers using satellites.

The Space Environment Services Center (SESC) at Boulder, Colorado, jointly operated with the United States Air Force Air Weather Service, is the designated national and international focal point for operational space environment services. SESC maintains a real-time data base to provide government agencies, industries, universities, foreign governments, and other foreign and domestic users current information on the state of the sun, the interplanetary medium, and the near-earth space environment. SESC also provides these users with forecasts and warnings of sudden solar disturbances and the effects on their activities.

Continuous solar data are obtained by the SESC from a worldwide, joint NOAA/Department of Defense (DOD) network of six solar optical and three radio observatories. An observatory, located at Boulder, Colorado, is operated by NOAA; and an observatory at Culgoora, Australia, is jointly operated by NOAA and the Australian Department of Science. Ionospheric, magnetic, and radar data from ground observatories are transmitted to the SESC through the global DOD communications network. Data from monitors on the GOES and NOAA polar-orbiting satellites are also received at the SESC. All of these data become part of a real-time data base maintained in the SESC computer memory for use in forecasts and warnings. The data are available to users anywhere who may retrieve them by direct teletype-computer coupling over long-distance telephone circuits or by direct broadcast from a commercial communications satellite.

Forecasts and warnings of solar disturbances and their effects on the earth's atmosphere are prepared and issued once daily by the SESC to civilian and military users. Predictions are issued for each of the next three days for the following: (1) the present probability of occurrence of major solar events in two categories of severity (intermediate and major) based on x-ray production; (2) the probability of solar events emitting charged particle clouds which will reach earth; (3) the solar radio emission level; and (4) the geomagnetic activity level. Intermediate-range, 27-day forecasts are issued for general levels of solar activity and background radiation levels from the sun. Long-range forecasts of the general level of solar activity are also issued in support of NASA and DOD satellite programs. In addition, short-range forecasts and warnings are transmitted immediately upon observation of a significant solar event. The forecasts and warnings are transmitted to users by telephone, teletype, and radio communications (using both civilian and military communications networks) and by direct broadcast from a commercial communications satellite.

The core of NOAA's solar-terrestrial service effort is the Space Environment Laboratory Data Acquisition and Display System (SELDADS), a system of small computers, which is dedicated to the real-time acquisition, processing, display, and dissemination of solar-terrestrial data. SELDADS provides the SESC forecasters with the necessary information to prepare forecasts, alerts, and warnings for users. In addition, some users are connected directly to SELDADS on a continuous basis or dial up the system on a regular basis to obtain specific information.

Supporting research and technique development is conducted at the Space Environment Laboratory to improve the quality of forecasts and implement new techniques to meet the growing needs of those who use equipment and distribution systems that are increasingly vulnerable to the effects of solar disturbances. This scientific support provides for the development and implementation of models, software and operational programs for more precise forecasts as well as data processing algorithms. An example of this work involves the development of quantitative geomagnetic forecasts and models for the movement of solar disturbances through planetary systems.

National climate program -- The National Climate Program was established by an Act of Congress in 1978, and is intended: (1) to improve our understanding of climate processes and (2) to make useful climate information available to the public, industry, and state and local governments. The National Climate Program Office serves as the administrative focal point for the program. The functions of the office include planning, coordination, and reporting (to the President and the Congress) on the progress of the program. Funds for the operation of the office are utilized for: staff salaries and services; planning studies (e.g., National Academy of Sciences Climate Board); and grants and contracts in support of certain programs mandated by statute. These statutory activities include: The Experimental Climate Forecast Program; Intergovernmental (Federal-State Cooperative) Climate Program, and various international climate program activities.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Scientific and Technical Publications	452	420	402
Major Field Experiments	8	7	6
Operational Models Developed	3	2	2
Research/User Conferences	28	25	15

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Meteorological research	361 (381)	$39,314	362 (383)	$33,974	+1 (+2)	-$5,340

A net increase of one position and a net decrease of $5,340,000 are proposed within this line item.

An increase of four positions and $1,000,000 is proposed to augment hurricane prediction research by refining and implementing a second generation operational hurricane prediction system by 1992. The new system will provide more timely and accurate forecasts of hurricane movement, intensity changes, and landfall by using: better analysis procedures for hurricane systems in the Tropics; real-time aircraft, satellite, and Omega dropwindsonde data; and moving nested grid models which interactively show both hurricane core and the the entire hurricane system. Several versions of the model are essentially available now in research form; conversion of these into an operational model will help save lives and reduce losses due to overwarning by permitting more accurate, credible predictions.

An increase of $500,000 is requested to accelerate research on remote sensing instrumentation using electromagnetic and acoustic waves to measure meteorological parameters. This work will improve the capability to remotely and continuously measure temperature and humidity profiles and total water vapor for potential incorporation into routine weather services. Once developed, a thermodynamic system linked with a wind profiler system could replace the current balloon sounding system at a lower cost per observation.

A decrease of $2,000,000 is proposed in the Program for Regional Observing and Forecasting Services (PROFS). The remaining base of $2,000,000 will maintain the PROFS facility and minimal support to the National Weather Service for the implementation of the Advanced Weather Interactive Processing System (AWIPS). The administration believes that much of the PROFS mission in demonstrating techniques to integrate diverse data sets has been accomplished as evidenced by the initiation of the AWIPS program. A lower funding level for PROFS will permit other researchers to use the facility for applications research on a reimbursable basis.

A decrease of three positions and $340,000 is requested in lower-priority meteorological and hydrological research activities. Solar radiation research will be terminated; and hydrological/snowmelt forecasts will be reduced by closing the Snow Research Laboratory in Danville, Vermont, and phasing out contract software support for the River Forecast System. These projects are related to NOAA's mission but not essential to it. To focus resources on highest priority new programs, such as Profiler, NOAA is requesting that less critical efforts such as these be terminated.

A savings of $2,250,000 will be achieved through termination of NOAA's participation in the North Dakota/Utah/Nevada/Illinois weather modification efforts. Results of such weather modification research efforts to date are inconclusive. Moreover, this type of state-specific cloud physics research is more appropriately undertaken and funded by the individual states.

A decrease of the 1986 Congressional add-on of $2,250,000 is proposed in research on mesoscale convective precipitation systems to improve forecasts of rainfall and flash floods and information on microbursts and winds. NOAA will defer future field experiments and detailed analysis and synthesis of data from recent field experiments (e.g. the 1985 Oklahoma/Kansas Pre-storm Experiment). Some analysis and forecasting research will continue using earlier data and NOAA will encourage university researchers to undertake studies using the newer data. In the future, NOAA will have access to improved observational capabilities which will enhance the cost-effectiveness of this type of research. In view of the need to achieve maximum benefit from research expenditures in an era of fiscal restraint, additional work in this area should be deferred until these improved capabilities are in place.

The position and object class detail for these changes follows:

		Annual Salary			
	Number	Increase	Decrease	Total	Location
	+2	+$63,238		+$63,238	Miami, FL
	+1	+31,619		+31,619	Washington, DC
	+1	+31,619		+31,619	Princeton, NJ
	-1		-$33,727	-33,727	Camp Springs, MD
	-1		-33,727	-33,727	Danville, VT
	-1		-33,727	-33,727	Silver Spring, MD
Total salaries	+1	+126,476	-101,181	+25,295	
Other personnel compensation		+3,524	-1,619	+1,905	
Less lapse	-1	-35,000		-35,000	
Total compensation		+95,000	-102,800	-7,800	
Personnel benefits		+52,900	-9,500	+43,400	
Travel and transportation of persons		+15,000	-25,600	-10,600	
Transportation of things		+14,500	-38,600	-24,100	
Rent, communications, and utilities		+5,200	-92,500	-87,300	
Printing and reproduction		+1,200	-6,200	-5,000	
Other services		+1,011,900	-5,726,400	-4,714,500	
Supplies and materials		+1,100	-283,000	-281,900	
Equipment		+203,200	-455,400	-252,200	
Grants and fixed charges		+100,000	-100,000		
Total		+1,500,000	-6,840,000	-5,340,000	

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Atmospheric climate research	71 (75)	$9,789	71 (75)	$8,789	... (...)	-$1,000

A decrease of $1,000,000 (object class 41.0) within the Global Atmospheric Research Program (GARP) will reduce GARP funds currently being used for the Tropical Ocean Global Atmosphere (TOGA) program. The FY 1987 budget includes $300,000 of World Climate Research Program funds in this line item which will be used to supplement the $2,500,000 available for TOGA in the Ocean Climate Research line item.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Air quality research	112 (118)	$10,783	117 (123)	$11,783	+5 (+5)	+$1,000

An increase of five positions and $1,000,000 (for a total program of $2,500,000) is requested to augment NOAA's monitoring of and research on radiatively important trace species (RITS). The program addresses the growing concern regarding RITS' role in global chemistry and effects on human and environmental health, climate, and acid rain. Species that absorb infrared radiation, such as methane, carbon particles, freon, and ozone, are accumulating in the atmosphere. If the increases continue, it is estimated that global "greenhouse" warming from these RITS species will be equal and additive to that expected from carbon dioxide. In addition, their effects on the global chemical balance will be significant and irreversible. The need exists to significantly improve our understanding of the sources, chemical transformations, sinks, distribution, trends, and impacts of these gases. An early, systematic approach to this problem, as proposed in this expanded global chemistry program, is far less costly than the crisis response common to many past environmental issues. Specifically, with the augmented level of funding for global chemistry, NOAA will establish two tropospheric ozone monitoring sites, begin regular measurements of key constituents of the atmosphere and water column along oceanic tracks, expand the field and laboratory studies of relevant chemical processes, and develop modeling techniques for assessing chemical and climate change. Since the projected effects of increased RITS concentrations would be global rather than limited to the U.S., RITS is an appropriate area for international cooperative research. NOAA is initiating the planning of an international RITS research effort.

The position and object class detail for this increase follows:

	Number	Annual Salary Increase	Location
	3	+$112,797	Boulder, CO
	1	+37,599	Seattle, WA
	1	+37,599	Miami, FL
Total salaries	5	+187,995	
Other personnel compensation		+2,005	
Less lapse	-1	-49,000	
Total compensation	4	+141,000	
Personnel benefits		+16,200	
Travel and transportation of persons		+11,000	
Transportation of things		+21,000	
Rent, communications, and utilities		+20,000	
Printing and reproduction		+4,400	
Supplies and materials		+100,000	
Other services		+316,400	
Equipment		+270,000	
Grants and fixed changes		+100,000	
Total		+1,000,000	

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Solar-terrestrial services and research...	72 (76)	$4,910	72 (76)	$4,610	... (...)	-$300

Savings of $300,000 (object class 25.0) are associated with deferring research at the Space Environment Laboratory aimed at long-term improvements in solar forecasting through in-house numerical modeling and simulation. NOAA will continue to conduct a core program of research on solar forecasting techniques, instrumentation, and data storage. This research seeks to improve the regular issuance of solar forecasts and warnings. Research will involve the interpretation of data from new and proposed real-time space monitors; maintenance of professional liaison with scientists in the solar-terrestrial field; and development of new forecasting techniques.

National climate program...	9 (9)	$1,948	9 (9)	$1,148	... (...)	-$800

A decrease of $800,000 (object class 25.0) is requested for this Congressional add-on. This will reduce Federal funding for the Regional Climate Center at the Desert Research Institute, Reno, Nevada, and climate research at that facility on the desertification of the arid west. This line item maintains the National Climate Program Office's ability to coordinate interagency climate programs.

Activity: Satellite and environmental data and information services
Subactivity: Satellite services

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Environmental satellite services.............	576 (600)	$54,000 (53,671)	534 (563)	$47,414 (48,268)	421 (450)	$45,227 (45,280)	422 (451)	$49,002 (49,055)	+1 (+1)	+$3,775
LANDSAT operations...........................	17 (17)	30,612 (21,097)	10 (11)	25,004 (34,526)	10 (11)	25,004 (25,004)	10 (11)	23,604 (23,604)	... (...)	-1,400
LANDSAT commercialization....................	... (...)	125,000 (125,000)	... (...)	... (...)	... (...)	... (...)	... (...)	... (...)	... (...)	...
Total requirements...........................	593 (617)	209,612 (199,768)	544 (574)	72,418 (82,794)	431 (461)	70,231 (70,284)	432 (462)	72,606 (72,659)	+1 (+1)	+2,375

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: Maintain reliable operational environmental and storm warning systems to protect life and property; monitor the earth's surface and space environmental conditions; and introduce improved atmospheric and oceanic observations and data dissemination capabilities. Develop and provide new and improved applications and products for a wide range of Federal agencies, state and local governments, and private users.

Objectives: Operate and maintain the NOAA satellites and acquire data from them. Process and analyze the data from NOAA, DOD, and other operational and research Earth-observing satellites. Supply data, interpretations, and consultation services to users, and determine requirements for future satellite systems. Conduct research to improve satellite systems capability for obtaining environmental data. Demonstrate better ways to use and distribute data from NOAA and NASA satellites, aircraft, and laboratory investigations, and apply these improvements to satellite data products for operational use. Evaluate and validate experimental temperature and moisture sounding data from the Visible Infrared Spin Scan Radiometer (VISSR) Atmospheric Sounder (VAS) carried on the NOAA geostationary satellites. Continue to provide for a data system that produces land resources information with accuracy, timeliness, and reliability required by users, and to provide for international participation in the land remote sensing system.

Base Program

Environmental satellite services -- Under this program, NOAA operates and maintains satellite ground facilities, ingests and preprocesses incoming satellite data, provides satellite-derived products to the users, and conducts research to improve the use of the satellite data. Activities include:

- Operate and maintain ground facilities to command and control the operational meteorological satellites, acquire satellite data, and transmit satellite data to the central processing and analysis center. These functions are carried out by the Satellite Operations Control Center (SOCC), Suitland, Maryland, and the Command and Data Acquisition (CDA) stations at Wallops Island, Virginia, and Fairbanks, Alaska.
- Ingest and process all data from the polar and geostationary spacecraft, including vertical atmospheric measurements (soundings), low-level wind vectors, and sea surface temperatures for input to the National Weather Service analyses and forecast models. Produce image products for facsimile distribution and produce a digital archive of the satellite data.
- Provide products for protection of life and property such as quantitative precipitation estimates for flash floods; hurricane classification; satellite monitoring and tracking of severe weather; agriculture monitoring; and sea ice and ocean front analyses.
- Conduct research to improve ways to obtain satellite data, and develop techniques for applying these data to atmospheric, oceanic and land monitoring, warning, and prediction.

The principal products derived from polar-orbiting satellite data are: (1) vertical temperature and moisture soundings; (2) sea surface temperature measurements; (3) global cloud cover images and mosaics; (4) crop assessment parameters for agriculture monitoring; (5) Search and Rescue; and (6) total ozone measurements. The principal products derived from geostationary satellites are: (1) full disc and sectorized cloud-cover images; (2) derived wind speed and direction; (3) assessments of hurricane motion and intensity; (4) severe thunderstorm detection and monitoring; and (5) warnings of potential flash flooding. Snow cover and sea and lake ice maps, and products to support agriculture are produced from data derived from both environmental satellite systems. The geostationary satellites also provide measurements of vertical temperature and moisture. Data is provided to users in many areas, such as aviation, agriculture, fishery operations, fruit frost predictions, forest fire detection, coastal tanker operations, game bird management, volcanic activity, locust detection, search and rescue, and offshore drilling. The application products are delivered through a variety of formats: user accessible data bases; photo facsimile images; satellite facsimile transmission (WEFAX); and archives. Techniques also are developed for new and improved applications of satellite data. Stratospheric sounding data derived from instruments developed and funded by the United Kingdom are relayed to the United Kingdom. Data Collection System (DCS) data, derived from French-funded ARGOS systems on the spacecraft, are relayed to the Project ARGOS in France as part of bilateral agreements. United States users, in turn, receive processed data from the French.

Analyses and interpretations of geostationary and polar-orbiting satellite data are prepared by the National Weather Service at seven forecast offices staffed with satellite experts. These offices receive high resolution images on a 24 hour-per-day, seven day-per-week basis from the GOES Central Data Distribution System. One station, San Francisco, receives the high resolution polar satellite data directly from the spacecraft. All of these offices analyze and interpret the cloud and earth surface images and associated products for their regional support. An automatic switching system enables the Weather Service forecast offices (WSFOs) and other users connected to the GOES data distribution system to select desired images by pressing three digits on a touch-tone telephone. These images are used in preparing aviation forecasts, short-term forecasts and warnings of hazardous events, such as severe local storms and tornadoes, and hurricane advisories and gale warnings. The products also are used in preparing river and flood forecasts, snow melt and sea ice analyses, and marine forecasts and warnings, including data for shipping, coastal and ocean fisheries, and recreational boating. GOES imagery is distributed to television stations, universities, state governments, industry, other Federal agencies through the GOES-TAP which allows the user to receive any of the standard image sectors available to a particular forecast office. At present this service is provided to 210 principal tap users. In this manner the data reaches the 52 WSFO's and about 600 other Federal and non-Federal organizations. The program also provides for the development of new applications and techniques for using satellite data in operational situations and training of field personnel. In addition, NOAA provides a focal point for user services related to the Data Collection System (DCS), Weather Facsimile (WEFAX) service, and the satellite direct broadcast systems, which include Automatic Picture Transmission (APT), High Resolution Picture Transmission (HRPT), and Direct Sounding Transmission (DST).

Weather research is necessary to improve our understanding of physical processes in the atmosphere, on land, and in the oceans. Satellites have unique capabilities to provide the basic data. NOAA will continue to improve weather forecasts and warnings using data from the VISSR Atmospheric Sounder (VAS). This effort started in FY 1984. The satellite's vantage point in space provides data coverage in both time and areal extent not achievable by other practical observational techniques or systems. Universities and industrial groups participate in developmental activities through contracts and grants for satellite-related research. NOAA also coordinates closely with related NASA and DOD research and development programs.

Landsat operations -- Under this program, NOAA operates Landsats 4 & 5. Data from these land remote sensing satellites are used by Federal, state, and local governments and the private sector. Information produced from spacecraft sensor data and processed by the ground facilities have applications in agricultural crop assessment, population growth monitoring, geological analysis related to petroleum and mineral extraction, pollution appraisal, and many other areas.

The Landsat ground processing facility receives MSS data through a transportable ground station at GSFC and through the NASA Tracking and Data Relay Satellite (TDRS). The NOAA ground processing system, located at the GSFC, does the initial processing of MSS data and is designed to move data through the processing system in less than 48 hours. High-priority data could be produced in a matter of hours. MSS data is then sent via a DOMSAT link to the EROS Data Center for final product processing. Computer compatible tapes (CCT) are available from EDC an average of two days later, and black-and-white film products for standing orders an average of twelve days later. Both the initial and final processing of TM data take place at GSFC. The processed data is shipped to EDC where products are generated and distributed. For future Landsat spacecraft operated by EOSAT, products will be generated at EOSAT's facilities.

Landsat commercialization -- The Administration proposes to discontinue subsidies for Landsat and to transfer fully responsibility for this program to the private sector. Landsat principally benefits special interests (e.g., oil companies) and should be funded by those interests rather than by the Government. The marketplace will determine whether additional Landsats will be flown. Since no funds were appropriated for this program in FY 1986, this decision has no effect on the FY 1987 base.

Output Performance Measures

Environmental Satellite Services - During periods of normal operations, product production is considered successful if we achieve 90 percent of each of our scheduled events. The effectiveness of satellite operations is measured by the following percentages of accomplishment:

	1985 Actual	1986 Estimate	1987 Estimate
Polar Orbiting Satellites			
Satellite Soundings	90%	92%	92%
Sea Surface Temperatures	90	92	92
Mapped Images	97	92	92
Facsimile Images	97	95	95
Data Transmissions	99	95	95
Geostationary Satellites			
Computer-Derived Winds	97	90	90
Weather Facsimile Transmissions	94	90	90
Facsimile	99	90	90
Daily Cloud Cover (discontinued 4/1/85)	99	...	...

Landsat operations -- During FY 1984 through FY 1987 the effectiveness of Landsat will be measured by the delivery of requested products to 80 percent of the customers within 14 days of receipt of data from the spacecraft or 12 days for archived data.

	1985 Actual	1986 Estimate	1987 Estimate
Landsat Satellites			
Delivery of requested products	90	80	80

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Environmental Satellite Services	421 (450)	$45,227	422 (451)	$49,002	+1 (+1)	+$3,775

NESDIS Mission Control Operations for Search and Rescue - An increase of one position and $3,775,000 is requested to establish the ground processing segment for receiving, processing, and distributing alert notifications and location data for the COSPAS/SARSAT program. COSPAS/SARSAT is an international cooperative effort using U.S.S.R. and NOAA environmental satellites to locate ships and aircraft in distress. The U.S. Mission Control Center/Data Distribution Center will be the regional distribution center for North and South America for the near future. Funding for the NESDIS Mission Control Operations Center for Search and Rescue is:

(dollars in thousands)

FY 87	FY 88	FY 89	FY 90	FY 91
$3,775	$2,450	$1,885	$1,885	$1,885

The position and object class detail for this increase follows:

	Number	Annual Salary Increase	Location
Total salaries	+1	+$30,100	Suitland, MD
Personnel benefits		+3,400	
Travel and transportation of persons		+4,000	
Transportation of things		+1,800	
Rent, communications, and utilities		+301,000	
Printing and reproduction		+200	
Other services		+1,343,600	
Supplies and other materials		+100	
Equipment		+2,090,800	
Total		+3,775,000	

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Landsat Operations	10 (11)	$25,004	10 (11)	$23,604	... (...)	-$1,400

A decrease of $1,400,000 (object class 25.0) is requested. This decrease reflects a reduced level of services for FY 1987.

Activity: Satellite and environmental data and information services
Subactivity: Satellite systems

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Polar spacecraft and launching...............	... (...)	$107,850 (107,860)	... (...)	$87,100 (87,100)	... (...)	$87,100 (87,100)	... (...)	$24,874 (24,874)	... (...)	-$62,226
Polar ground systems.........................	... (...)	1,925 (1,459)	... (...)	3,250 (3,730)	... (...)	3,250 (3,250)	... (...)	6,300 (6,300)	... (...)	+3,050
Geostationary spacecraft and launching.......	... (...)	89,201 (89,154)	... (...)	143,983 (143,983)	... (...)	143,983 (143,983)	... (...)	118,530 (118,530)	... (...)	-25,453
Geostationary ground systems.................	... (...)	3,779 (3,765)	... (...)	5,796 (5,796)	... (...)	5,796 (5,796)	... (...)	18,435 (18,435)	... (...)	+12,639
Total requirements...........................	... (...)	202,765 (202,238)	... (...)	240,129 (240,609)	... (...)	240,129 (240,129)	... (...)	168,139 (168,139)	... (...)	-71,990

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To maintain a system of polar-orbiting satellites that obtain global environmental data; to maintain a system of geostationary satellites that provide near-continuous observations of the earth's western hemisphere; and to participate in an interagency and international program to acquire, process and distribute global oceanic data.

Objectives: Continue procurement of spacecraft, instruments, launching capability, and ground equipment necessary to maintain uninterrupted operational polar-orbiting and geostationary satellite systems to: (1) obtain quantitative environmental data such as temperature, moisture, winds, radiation flux, and solar energetic particle flux, used in numerical analysis and prediction programs; (2) locate and collect data from remote fixed and moving platforms, such as buoys, balloons, and ships; (3) provide imagery of the earth and its environment on a regular basis, day and night, including direct readout and environmental data broadcasts to ground stations; and (4) provide search and rescue date to locate aircraft and ships in distress.

Base Program

NOAA's geostationary and polar-orbiting environmental observing satellites are complementary and provide unique sources of observations of the earth's atmosphere, oceans, surface, and near space. Each geostationary satellite provides an image every 30 minutes (more frequently for special observation) needed to detect, track, and monitor the growth and decay of severe weather systems in the temperate and tropical latitudes of the

Western Hemisphere. The polar-orbiting NOAA satellites provide daily global observations of quantitative environmental data used to derive profiles of atmospheric temperature and moisture, sea surface temperatures, snow and ice coverage, and ozone observations. The satellites also collect data from remote fixed and moving observation platforms, locate data collection platforms, and assist in search and rescue operations for aircraft and ships in distress. The geostationary and polar-orbiting satellites also carry instruments to monitor the state of solar activity. For comparison, the resolution and time between observation for the two satellite systems are:

System	Period	Resolution
Geostationary Satellites	5 to 30 minutes	1 to 8 kilometers
Polar Environmental Satellites	12 hours	1 to 4 kilometers

Procurement of satellites is a cooperative venture with NOAA and NASA having key roles. NOAA as the operating agency represents the user and defines the basic requirements for the system. NASA as the agency with multi-disciplinary engineering expertise develops detailed specifications and procures and launches the spacecraft through multi-year procurements using reimbursable funds from NOAA.

Well in advance of the procurement NOAA begins preparing budget estimates. These estimates are formulated to reflect the total cost of the satellite series, including contractor costs for satellite and instrument development and fabrication, NASA support, launch vehicles and launching services, program management and any other associated costs. Yearly cost increments are phased to maintain the delivery and launch schedule at the optimum cost to NOAA. Specification preparation, requests for proposals, and negotiations are completed based upon planning for contract award at the time when funding first becomes available. The delivery of the first satellite in any new procurement series is expected approximately 5 years from the date of contract award.

Polar spacecraft and launching -- This program contains funds for procurement and launch of the polar-orbiting operational environmental satellites. NOAA-6, launched June 1979, and NOAA-9, launched December 1984, are the current operational satellites. NOAA-G is scheduled for launch in March, 1986 to replace NOAA-6. Activities projected for FY 1987 include the continued fabrication of NOAA-H, I, and J spacecraft sensors; the preparation of Atlas launch vehicles necessary for their launches; and the development, instrument procurement and early fabrication phase of NOAA-K,L,M. Replacement launches will be determined after careful analysis of in-orbit capabilities and updated life expectancy estimates. Launches will be scheduled on 18-month intervals starting with the spacecraft that replaces NOAA-H. All satellites through NOAA-I will be launched using Atlas launch vehicles obtained from the Air Force through NASA on a reimbursable basis. Estimates contained in this request for NOAA-J and the NOAA-K,L,M series of satellites assume launch on Titan expendable launch vehicles. A final decision on whether to launch these spacecraft on Titan vehicles or on the Space Transportation System (Shuttle) is under review.

The polar-orbiting satellite is a three-axis stabilized satellite which carries the following instruments:

- TOVS - Tiros Operational Vertical Sounder provides atmospheric temperature and water vapor profiles.
- AVHRR - Advanced Very High Resolution Radiometer provides medium resolution (4 km) cloud images which are continuously broadcast through the Automatic Picture Transmission (APT) system. It also provides high resolution (1 km) data with direct readout through the High Resolution Picture Transmission (HRPT) system. The 4km images are recorded on board the spacecraft for global coverage. Only partial orbit Sectors of the 1km data are recorded.
- DCPLS - Data Collection and Platform Location System, called ARGOS, furnished by France.
- SEM - Space Environment Monitor provides measurements of solar activity.
- SBUV - Solar Backscatter Ultra Violet Ozone Monitoring Instrument (NASA funded protoflight for NOAA-F and three NOAA flight units for following spacecraft.)
- SAR - Search and Rescue Instruments - Furnish by Canada and France.

Polar ground systems -- This line item contains funds for the procurement of ground-based equipment to command and control the spacecraft and process data for users.

The polar-orbiting ground system is functionally divided into two major subsystems: (1) The Data Acquisition and Control Subsystem (DACS) controls and monitors the health of the spacecraft, receives data from the satellite instruments, and, when necessary, processes corrective actions; and (2) the Data Processing and Services Subsystem (DPSS) prepares data and analyses for users of operational satellite products.

Geostationary spacecraft and launching -- This line item contains funds for the multi-year procurement and launch of the geostationary operational environmental satellites. There are two operational satellites, located over the equator at 75° and 135° West longitude. One stand-by spacecraft is positioned centrally over the continental U.S. to transmit satellite and standard meteorological products through the Weather Facsimile system (WEFAX).

The geostationary satellites through GOES-H will be launched on Delta launch vehicles. NASA is reimbursed for the vehicle and launch services beginning three years prior to the scheduled launch date. The GOES-I and following satellites will be designed to be launched using the Space Transportation System (Shuttle). The Shuttle launches must be scheduled and funded in accordance with the NASA policy for the use of the Shuttle system.

Funds for the continuation of a two-spacecraft geosynchronous orbit operational system show annual fluctuations because of variations in costs of spacecraft and launching. FY 1987 funding is required for development and fabrication of GOES-I through M spacecraft and for initial funding of the planned FY 1990 Shuttle launch of GOES-I.

The current series of geostationary satellites are spin-stabilized satellites which carry the following instruments:

- VAS - Visible and Infrared Spin Scan Radiometer (VISSR) Atmospheric Sounder, the principal GOES sensor, provides 8-km resolution infrared and 1-km resolution visible images of the full earth disc and measurements of atmospheric temperature and moisture.

- SEM - Space Environment Monitor provides measurements of solar radiation data.

- DCS - Data Collection System is used to collect and relay environmental data measured by a variety of remotely located observing platforms.

Geostationary ground systems -- This line contains funds for the procurement of necessary ground equipment unique to the geostationary satellites consisting of: sectorizers, located in the Central Data Distribution Facility (CDDF), for making specific sectors from the full earth-disc pictures for use by NESDIS, NWS, and outside organizations; Data Collection System (DCS) computers, also located in the CDDF, for processing and storage of incoming data from remote observing stations; computers for ingesting data scheduled for processing in the NOAA computers; electronic processing equipment to produce image animations; interactive processing equipment to derive wind speed and direction; antennae for receiving stretched data from the Wallops CDA station; associated microwave and telephone links for transmitting data to the CDDF and out to some of the users (satellite data are transmitted to the San Francisco, Honolulu, and Anchorage Satellite Field Service Stations by commercial satellite communications); receiving, transmitting and associated equipment at the Wallops CDA Station; and spacecraft command, monitoring and control equipment at Suitland, Maryland.

Output Performance Measures

Performance in the Satellite Systems subactivity is measured by adherence to launch schedules listed below:

SATELLITE DESIGNATOR	PLANNED LAUNCH DATE
Planning Launch Schedule - One-Polar Orbiting System	
NOAA-F	CY 1984
NOAA-G	CY 1986
NOAA-H	CY 1986
NOAA-I	CY 1988*
NOAA-J	CY 1989*
NOAA-D 1/	...
NOAA-K	CY 1991*
NOAA-L	CY 1992*
NOAA-M	CY 1994*
Planning Launch Schedule - Geostationary System	
GOES-G	CY 1986*
GOES-H	CY 1986*
GOES-I	CY 1990*
GOES-J	CY 1990*
GOES-K	CY 1991*
GOES-L	CY 1994*
GOES-M	CY 1994*

* Launch date is dependent upon performance of prior spacecraft. Launches subsequent to NOAA-H will be scheduled on 18-month intervals. Progress toward attaining this launch schedule will be measured by NASA "Project Management Report" which reports status of funding, cost schedules and problems on a monthly basis.

1/ NOAA-D is not planned to be launched under a one polar orbiting system, but will be held as a spare.

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Polar Spacecraft and Launching	... (...)	$87,100	... (...)	$24,874	... (...)	-$62,226

A decrease of $62,226,000 (object class 25.0) is requested. The remaining funds provide for conversion to a one-polar satellite system. Conversion from the current two-polar system to a one-polar system will take place when the NOAA-10 satellite, planned to be launched in 1986, fails (probably sometime in 1988).

Conversion to a single satellite system allows delay of the procurement of follow-on spacecraft (NOAA-K,L,M). The estimated annual savings are shown in the table below:

(dollars in thousands)

	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
Existing-spacecraft system 1/	$ 88,080	$133,370	$136,550	$134,000	$168,830
Proposed-spacecraft system 1/	$ 31,174	125,096	120,936	122,374	146,809
Annual Savings	56,906	8,274	15,614	11,626	22,021

1/ Includes ground system costs.

There is no significant degradation in the quality of weather forecasts from operating a one-polar system instead of a two-polar system. Both the current and proposed improvements being made in the GOES satellites for improving images and providing operational soundings will supplement the soundings from the one-polar satellite over the western hemisphere. In addition, soundings are provided by Defense polar satellites. The major effect of the change to a one-satellite system is an increased risk of the loss of all polar coverage which would diminish the accuracy of the forecasts. The proposed schedule of satellite launches every 18 months will keep this risk within acceptable levels. The design life of the satellite is two years. A loss of all coverage from civil polar satellites may occur in the event of failure on launch or premature failure in orbit. In most cases, should the satellite in orbit show signs of failing, a backup would be launched as soon as possible.

The one polar-orbiter system should be able to satisfy the U.S. contribution to the SARSAT-COSPAS program. The SARSAT transponder has an inherently longer lifetime than most of the other instruments on the satellite, particularly the primary meteorological sensors. A failure in those instruments, or a partial failure of the satellite, would not necessarily disrupt SARSAT operations, and the SARSAT transponder could function well beyond the satellite's normal mission lifetime. Thus, following the launch of NOAA-G, the one-polar system should maintain a two-SARSAT system through 1990.

The work to be accomplished in FY 1987 includes continued fabrication, integration and testing of NOAA-H and I spacecraft and continued refurbishment of Atlas launch vehicles required for future launches. NOAA-D will not be used as an operational spacecraft under one-polar launch plan because it does not have the capability to satisfy either the full afternoon sounding mission, or the Search and Rescue and ozone monitoring (SBUV) missions. In addition, the NOAA-J spacecraft will be modified to include an advanced sounder (AMSU) and an SBUV. These changes will make NOAA-J functionally identical to the next series of spacecraft (NOAA-K,L,M).

The following table identifies future increments in multi-year procurements for the proposed program:

(dollars in thousands)

	FY 85 & Prior	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	To Complete	Total All Years
NOAA A-G									
Spacecraft.............	$124,492	$2,800	$2,700						$129,992
Launching...............	69,971	4,800	5,100						79,871
Subtotal............	194,463	7,600	7,800						209,863
NOAA H,I,J									
Spacecraft..............	169,458	74,700	244	$25,040	$15,604	$14,896	$3,400		303,342
Launching...............	28,200	3,800	9,930	7,416					49,346
Subtotal............	197,658	78,500	10,174	32,456	15,604	14,896	3,400		352,688
NOAA K,L,M									
Spacecraft..............	5,200	1,000	6,900	67,200	73,401	79,098	76,749	$105,582	415,130
Launching...............				7,140	13,631	25,080	36,660	96,000	178,511
Subtotal..........	5,200	1,000	6,900	74,340	87,032	104,178	113,409	201,582	593,641
Follow-on System..........							30,000	*	30,000
Total Requirements........	397,321	87,100	24,874	106,796	102,636	119,074	146,809	201,582	1,186,192

* Estimates for completion of follow-on system not provided.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Polar Ground Systems	... (...)	$3,250	... (...)	$6,300	... (...)	+$3,050

An increase of $3,050,000 (object class 25.0) is requested. Funds are required in FY 87 to refurbish and upgrade existing ground system components and add components which will be required by follow-on polar orbiting satellites. These changes are being driven by changes to the sensing instruments and communication characteristics of the modified NOAA-J and the follow-on NOAA-K,L,M spacecraft. The upgraded ground system must be in place by early FY 1990 to support the planned launch of NOAA-J.

The funding for the polar ground system is:

(dollars in thousands)

FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
$6,300	$18,300	$18,300	$3,300	...

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Geostationary Spacecraft and Launching	... (...)	$143,983	... (...)	$118,530	... (...)	-$25,453

A net decrease of $25,453,000 (object class 25.0) consisting of changes in two programs:

GOES-G&H - A decrease of $43,403,000 reflects the completion of the GOES G&H program. Both spacecraft are scheduled to be launched in FY 86. The total cost for all years for the program was reduced by $10,000,000 to reflect lower than planned sole-user launch services costs.

GOES-I-M - An increase of $17,950,000 is requested to continue the procurement of GOES-I through M spacecraft and associated Shuttle launch services. The GOES-I,J,K contract was awarded in FY 1985 and the option to procure GOES-L&M was exercised in December, 1986. The GOES-I through M program will provide the spacecraft required to continue a two satellite, geostationary system through the mid-1990's.

The total estimated cost for the program has been reduced by $100,000,000 over previous estimates based on negotiated contract prices.

The following identifies future increments in multi-year procurements for requested GOES program:

(dollars in thousands)

	FY 85 & Prior	FY 86	FY 87	FY 88	FY 89	FY 90	FY 91	To Complete	Total All Years
GOES G&H									
Spacecraft................	$117,976	$21,503							$139,479
Launching.................	64,259	21,900							86,159
Total.....................	182,235	43,403							225,638
GOES I-M									
Spacecraft................	37,700	100,580	$112,830	$87,035	$60,745	$4,845	$17,115	$107,600	528,450
Launching.................			5,700	18,700	29,200	10,800	5,000	66,400	135,800
Total.....................	37,700	100,580	118,530	105,735	89,945	15,645	22,115	174,000	664,250
TOTAL FY 1987 REQUEST..................	219,935	143,983	118,530	105,735	89,945	15,645	22,115	174,000	889,888

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Geostationary Ground Systems..	... (...)	$5,796	... (...)	$18,435	... (...)	+$12,639

A net increase of $12,639,000 (object class 31.0) consisting of changes in two programs.

GOES-Next Ground System - An increase of $14,100,000 is requested for the GOES-Next Ground System to continue efforts initiated in FY 1986 for the initial transition of ground equipment and facilities to the GOES-I through M satellite series. GOES-Next is to be a new spacecraft, not merely a modified or enhanced continuation of the present GOES spacecraft. Therefore, for several years after the launch of the first GOES-Next spacecraft, the ground systems must provide for simultaneous, uninterrupted GOES data acquisition and distribution from two different types of spacecraft.

The new ground system will allow for expansion of new mission requirements with the present GOES, accommodate concurrent operations with two generations of GOES, and have the capabilities to accommodate the expanded capacity of GOES-Next necessary to meet NOAA requirements.

Among the capabilities to be provided are: simultaneous acquisition and processing of imaging, sounding and WEFAX; and replacement or refurbishment of subsystems such as the Interactive Flash Flood Analyzer, Wallops Timing System and the Image Registration and Gridding System (VIRGS).

GOES Ground Systems - A built-in decrease of $1,461,000 is associated with the near-completion of a multi-year ground system modification effort that began in FY 1983. The remaining funds will allow completion of this effort during FY 1987.

Funding in future years is as follows:

(dollars in thousands)

	FY 87	FY 88	FY 89	FY 90	FY 91
GOES-Next Ground System	$16,800	$17,200	$10,200	$1,600	$1,675
GOES Ground System	1,635	2,075	1,500	1,500	
Total	18,435	19,275	11,700	3,100	1,675

Activity: Satellite and environmental data and information services
Subactivity: Data and information services

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Climatic data services........................	207 (216)	$9,880 (10,007)	217 (231)	$9,575 (9,575)	180 (194)	$9,181 (9,181)	180 (194)	$9,181 (9,181)	... (...)	...
Ocean data services...........................	83 (86)	5,165 (4,919)	86 (91)	5,129 (5,395)	82 (87)	5,138 (5,138)	82 (87)	5,138 (5,138)	... (...)	...
Geophysical data services.....................	64 (67)	3,532 (3,539)	66 (70)	3,514 (3,514)	65 (69)	3,526 (3,526)	65 (69)	3,526 (3,526)	... (...)	...
Assessment and information services..........	100 (104)	5,959 (6,417)	91 (96)	4,901 (4,901)	81 (86)	4,889 (4,889)	81 (86)	4,889 (4,889)	... (...)	...
Total requirements............................	454 (473)	24,536 (24,882)	460 (488)	23,119 (23,385)	408 (436)	22,734 (22,734)	408 (436)	22,734 (22,734)	... (...)	...

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To provide worldwide environmental data and information products and services in the atmospheric, marine, solid earth, and solar-terrestrial sciences to meet the needs of users in commerce, industry, agriculture, science and engineering, the general public, and Federal, state and local agencies. These products and services are used in decisions critical to the national economy; national defense; the productivity of American industry; energy development and distribution; world food supplies; public health, safety, and welfare; and the development of natural resources.

Objectives: To increase productivity and improve support to the national economy, food and energy industries, and the military services by developing an integrated computer system; to improve the quality and accessibility of national environmental data and information files to increase their value and utility; and to improve environmental data products and services, including assessments of the impact of environmental fluctuations on the national economy.

Base Program

The National Oceanic and Atmospheric Administration (NOAA) gathers worldwide environmental data about the oceans, earth, air space, and sun and their interactions to describe and predict the state of the physical environment. Other agencies, organizations, and individuals, both domestic and foreign, also collect environmental data for their particular uses and missions. Once the original collection purposes have been served, selected data flow to NOAA's environmental data and information service centers, which incorporate them into the national environmental data base.

From the national data base, these service centers provide global data and information products and services to over 130,000 users per year in commerce, industry, agriculture, science and engineering, the general public, and Federal, state and local governments. These include assessments of the impact of environmental fluctuations on industrial productivity and the national economy, national defense, energy development, global food supplies, natural resources, natural hazards, and human health.

Climatic data services -- The National Climatic Data Center (NCDC), NOAA's largest data center, is located in Asheville, North Carolina, with a Satellite Data Services Division (SDSD) located in Camp Springs, Maryland. By authority delegated from the National Archives and Records Service, General Services Administration, NCDC is responsible for the National Archives of Weather Data for the United States. The NCDC annually receives, processes, and archives over 30 million conventional meteorological observations comprising surface, marine, upper air, and solar radiation data. In addition, SDSD archives approximately 150,000 digital data tapes and 10,000,000 photo images and adds the equivalent of 300,000 tapes and 250,000 images a year. Also, the equivalent of 700,000 tapes are kept for SDSD by the University of Wisconsin. Data are gathered from the National Weather Service, NOAA's satellite programs, military services, the Global Telecommunications System, and other national and international sources to provide a National Climatic Data Base in digital, analog, microfilm, photo imagery, and manuscript forms. NCDC provides data and summaries and related products to a large and diverse user community. There are more than 78,000 subscriptions to regularly published NCDC data, and over 88,000 user requests were answered in 1985. The data and publications are used by planners, designers, engineers, lawyers, academic groups, government agencies, and the public. General publications serve the needs of broad user audiences. Other data publications are designed to meet specific national needs. These include publications related to studies of (1) the use of climatic data products and applications to improve energy development and conservation, food production, and human health; (2) the use of data analyses in decisions concerning the economics of construction, power production, siting of airports, and offshore development; and (3) the climate and climatic trends of the United States. NCDC also performs climatic applications studies for other government agencies, including NASA and the Navy.

Ocean data services -- The National Oceanographic Data Center (NODC), located in Washington, D.C., is the world's largest repository of oceanographic data. Data are made available to industry, government agencies (Federal, state, and local), academic and private research institutions, the general public, and foreign governments and private organizations, either on an exchange or reimbursable basis. Regional liaison offices serve local marine data user communities. A large volume of data is acquired through international exchange agreements. Holdings at the end of FY 1985 include over 1,610,000 bathythermograph records; sea-surface to bottom or near-bottom records from 860,000 stations containing temperature, salinity, and in many instances, nutrient chemistry data; 18,000,000 surface and selected subsurface current measurements; and 400,000 surface temperature and salinity records. Data from automated ocean buoys include more than 16,500,000 records. Holdings also include more than 7,000 other automated data sets containing approximately 15,000,000 records from special projects or surveys such as the Marine Ecosystems Analysis Program (MESA), and Outer Continental Shelf Environmental Assessment Program (OCSEAP), as well as data from current measurements, fixed platforms or floats, and salinity-temperature-depth measurements, seawater chemistry summaries, atlases, the *Mariners Weather Log*, and *Computer Programs in Marine Sciences*. Special data summaries include data bases and tailored products prepared for Ocean Thermal Energy Conversion (OTEC) studies and studies for ocean dumpsites. The Center operates World Data Center A and is responsible for activities required by Section 8 of the National Ocean Pollution Planning Act (P.L. 95-273) of 1978.

Geophysical data services -- The National Geophysical Data Center (NGDC), located in Boulder, Colorado, provides data and data products and services concerning the physical properties of the earth, its snow and ice environment, the ocean floor and submarine crust, and solar activity and its effects on the earth's environment. Disciplines covered include seismology, geomagnetism, gravity, geochemistry, geothermal energy, marine geology and geophysics, the ionosphere, magnetosphere, solar activity, glaciers, snow cover, ice sheets, sea ice, and paleoclimatology. In 1985, users included more than 8,000 industrial organizations, scientists, engineers, surveyors, lawyers, and members of the public. The organizations served included 50 departmental bureaus and independent agencies, about 100 universities and nonprofit research establishments, industries and commercial firms, and several hundred foreign organizations, many of which provide data for World Data Centers A for Solar-terrestrial Physics, Solid Earth Geophysics, Marine Geology and Geophysics, and Glaciology which are operated by NGDC. Selected data are exchanged with World Data Center B in Moscow and World Data Centers C in Europe and Japan, under the auspices of the International Council of Scientific Unions. Data are collected through formal or informal arrangements with other government agencies, universities and many foreign sources. The Center prepares a number of standard summaries and listings, such as consolidated lists of solar flares compiled from worldwide observations. Special summaries and reports are prepared to meet specific user needs. Examples include maps of Tsunami occurrences, geothermal data maps, and magnetic products for surveyors. In FY 1985, hundreds of magnetic tapes and copies of aero-magnetic data, well log data, and seismic reflection data were made available to oil exploration companies.

Assessment and information services -- These activities, located in the Washington, D.C., area with a climate Impact Modeling Branch in Columbia, Missouri, provide quantitative environmental impact assessments, data interpretations and analyses, and library and information retrieval services to meet national and international user needs. Current and historical environmental data are used to aid managers of critical national resources by assessing impacts of climate variations on food, water availability, transportation, and energy resources, and by assessing impacts of offshore energy developments on marine resources. Impact assessment is accomplished by development and application of statistical and other numerical models; preparation of model inputs from multidiscipline data bases; and tracking and verifying climatic anomalies on a global basis. The Center manages the NOAA Library and Information Service and also provides central publication services for the dissemination of NOAA's research and technical services program. Distribution is made to scientists, engineers, and other users in local, state, and Federal agencies; depository libraries; universities; and other organizations engaged in scientific studies. Over 16,000 requests per year for assessments and technical information are answered. This activity also acquires, indexes, archives and disseminates scientific and technical publications, reports, and abstracts from domestic and international sources on oceanic, atmospheric, earth, and space sciences and technologies. Other agencies, organizations, and individuals, both domestic and foreign, also collect environmental data for their particular uses and missions. Once the original collection purposes have been served, selected data flow to NOAA's environmental data and information service centers, which incorporate them into the national environmental data base. A survey of all data is accomplished for the National Environmental Data Referral Service.

Output Performance Measures

	User Requests Serviced		
	1985 Actual	1986 Estimate	1987 Estimate
Climatic data services	88,300	92,000	96,600
Ocean data services	5,200	5,700	6,300
Geophysical data services	7,500	7,200	7,500
Assessment and information services	16,500	16,000	16,000
Total	117,500	120,900	126,400

Activity: Program support
Subactivity: Executive direction and administration

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Executive direction	359	$22,370	415	$22,068	397	$22,081	397	$22,081	...	...
	(372)	(21,337)	(435)	(24,041)	(417)	(22,084)	(417)	(22,084)	(...)	
Central administrative support	868	25,044	790	24,929	766	24,904	766	24,904	...	...
	(904)	(25,218)	(835)	(25,229)	(811)	(24,904)	(811)	(24,904)	(...)	
Facilities	...	...	...	...	...	...	...	1,000	...	+$1,000
	(...)	(...)	(...)	(...)	(...)	(...)	(...)	(1,000)	(...)	
Retired pay commissioned officers	...	4,632	...	4,632	...	5,019	...	5,019	...	...
	(...)	(4,095)	(...)	(5,302)	(...)	(5,019)	(...)	(5,019)	(...)	
National Advisory Committee on the Oceans and Atmosphere (NACOA)	12	630	8	500	8	500	...	...	-8	-500
	(13)	(630)	(12)	(500)	(12)	(500)	(...)	(...)	(-12)	
Total requirements	1,239	52,676	1,213	52,129	1,171	52,504	1,163	53,004	-8	+500
	(1,289)	(51,280)	(1,282)	(55,072)	(1,240)	(52,507)	(1,228)	(53,007)	(-12)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To provide the National Oceanic and Atmospheric Administration with executive leadership in the conduct of its Federally mandated responsibilities, to advise the Legislative and Executive Branches on the status and future requirements of the Nation's oceanic and atmospheric activities, and to provide administrative services to DOC/NOAA organizations throughout the country.

Objectives: To administer programmatic and administrative policies established by the Department of Commerce and the Office of Management and Budget; to establish operational policies to guide the agency in the conduct of its affairs; to provide program support and direction; to propose and defend the Administration's budget for the agency; to provide administrative support services to all NOAA and to DOC field components; and to provide retirement benefits to NOAA commissioned officers and their families.

Base Program

Executive direction -- This activity provides for the overall executive management of the National Oceanic and Atmospheric Administration. Staff offices provide support to the Administrator in the areas of policy and planning, legal counsel, budget and finance, Congressional affairs, interagency programs, public affairs, civil rights, business affairs, extension program services, and correspondence control.

Central administrative support -- This line item is NOAA's share of the resources to operate five DOC/NOAA Regional Administrative Support Centers (RASCs) and a Regional Administrative Support Center Operations Office (RASCOO).

Regional Administrative Support Centers are located in Seattle, Washington; Boulder, Colorado; Kansas City, Missouri; Norfolk, Virginia; and Washington, D.C. The RASCOO, which is also located in Washington, D.C., is responsible for providing overall management and administrative policy guidance to the RASCs.

Administrative support activities conducted by all RASCs include the implementation of administrative policies, standards and procedures established by the Department of Commerce; maintenance of administrative payments, payroll and personnel systems; real property and space management (including warehousing); procurement, publications, health and safety services, mail management, vehicle fleet management, facility engineering services, and other related support functions.

Facilities -- This line item establishes permanent base funding for overdue repairs and maintenance on major research and operational facilities, primarily NOAA's fisheries laboratories and other fisheries field facilities. The repairs are needed to reduce threats to employee health and safety and to improve operational efficiency. In FY 1987 the funds will be provided by a one-time transfer from the Fisheries Loan Fund. Beginning in FY 1988 the facilities fund will be financed by $500 annually in new budget authority.

Retired pay commissioned officers -- This activity provides the retirement pay of NOAA commissioned officers and payments to survivors of retired officers under the Retired Serviceman's Family Protection Plan and the Survivors Benefit Plan. In FY 1986, retired pay and health care benefits will be paid to 139 retired officers and 39 survivors of annuitants. Also included is $440,000 for health care benefits to the retired officer community.

National Advisory Committee on Oceans and Atmosphere (NACOA) -- The National Advisory Committee on Oceans and Atmosphere Act of 1977 established a non-Federal body of 18 members having interest and expertise in oceanic and atmospheric affairs. NACOA reviews the Nation's marine and atmospheric policies and programs; reports to the President and Congress on an annual basis and by special reports; and advises the Secretary of Commerce on policy matters affecting the goals and objectives of NOAA. Administrative support, such as financial, budgetary, and other housekeeping services, are provided directly by NOAA. This committee is proposed for termination in FY 1987.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Employees serviced........	15,978	15,580	13,750
Procurement actions processed........	60,500	59,900	55,700
Controlled correspondence processed........	2,900	2,900	2,600

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Facilities	... (...)	...	... (...)	$1,000	... (...)	+$1,000

An increase of $1,000,000 (object class 25.0) is requested to establish permanent base funds for overdue repairs and maintenance on major research and operational facilities, primarily NOAA's fisheries laboratories and other fisheries field facilities. The repairs are needed to reduce threats to employee health and safety and to improve operational efficiency. FY 1987 funds, will be provided by a one-time transfer from the Fisheries Loan Fund, beginning in FY 1988 the facilities fund will be financed by $500,000 annually in new budget authority.

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
National Advisory Committee on Oceans and Atmosphere (NACOA)	8 (12)	$500	... (...)	...	-8 (-12)	-$500

A decrease of eight positions and $500,000 is proposed to eliminate of the National Advisory Committee on Oceans and Atmosphere (NACOA). This action is consistent with the Administration's efforts to reduce the number of Federal advisory committees, particularly where these duplicate the work of other Federal agencies. Review of the Nation's atmospheric and marine policies and programs can be effectively carried out by the involved agencies and through other existing coordinating mechanisms.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
Total compensation	-8	-$347,700	Washington, DC
Personnel benefits		-33,300	
Transportation of things		-3,300	
Rent, communications, and utilities		-500	
Printing and reproduction		-7,100	
Other services		-108,000	
Equipment		-100	
Total		-500,000	

Activity: Program support
Subactivity: Marine services

(dollar amounts in thousands)

	1985 Actua.		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ship operations.............................	786	$36,400	734	$36,450	579	$35,207	434	$26,104	-145	-$9,103
	(805)	(36,985)	(757)	(36,450)	(606)	(35,207)	(465)	(26,104)	(-141)	
Ship maintenance and support services........	185	24,862	101	22,264	96	22,330	82	21,407	-14	-923
	(191)	(24,975)	(109)	(22,307)	(104)	(22,330)	(92)	(21,407)	(-12)	
Total requirements...........................	971	61,262	835	58,714	675	57,537	516	47,511	-159	-10,026
	(996)	(61,960)	(866)	(58,757)	(710)	(57,537)	(557)	(47,511)	(-153)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To obtain data on the chemical, physical, biological and geological characteristics and behavior of the oceans, the seafloor, the Great Lakes and the ocean-atmosphere interface by operating ocean and coastal vessels for use by NOAA, other Federal agencies and academic institutions. These organizations use the ships for programs which support marine navigation, marine resource development, business and economic activity, protection of life and property, and increased scientific knowledge.

Objectives: (1) provide ships with the size, range, laboratory space, accommodations and marine equipment to meet user requirements and schedules within available resources; (2) provide fuel, operating supplies, personnel, laboratory and deck equipment, sensor packages, communications and navigation equipment to meet user requirements and schedules within available resources; (3) develop annual ship operating schedules based on program requirements; (4) develop annual and long-term plans for ship construction, rehabilitation, and maintenance to ensure optimum long-term use and readiness; (5) design, develop and engineer ship systems to ensure cost effective operation, and to meet user requirements and safety/legal regulations; and (6) train and qualify NOAA personnel for diving to ensure safe and effective operations of programs requiring diving.

Base Program

Ship operations -- The NOAA Fleet is composed of 23 major vessels (all will operate during some portion of FY 1986). These vessels, ranging in length from 86 to 303 feet, conduct operations that support NOAA's programs in nautical charting, fisheries research, resource assessment, marine environmental baseline assessment, coastal ocean circulation, deep ocean mineral site assessment and oceanographic and atmospheric research. In FY 1986, a reprogramming is proposed to reactivate the Class I deep ocean research vessel OCEANOGRAPHER to meet program requirements for at-sea research and environmental monitoring. This reprogramming proposal includes deactivation of two Class III hydrographic/oceanographic vessels, the PEIRCE and WHITING. The two Class III ships will be maintained alongside at NOAA's Norfolk ship base, the Atlantic Marine Center. NOAA plans to operate the OCEANOGRAHER in FY 1987 by continuing to maintain the PEIRCE in an inactive status and by reducing Class II ship operations. The 23 vessels will operate for a total of 4,262 days-at-sea (DAS) in FY 1986. Characteristics, home port, and DAS by program are tabulated below:

FY 1986 NOAA Ship Operations

Mapping and Charting - 1,444 DAS

Ship	Length-Class	DAS	Home Port
DISCOVERER*	303 ft. - I	53	Seattle, Washington
SURVEYOR*	292 ft.- I	140	Seattle, Washington
RAINIER	231 ft.- II	180	Seattle, Washington
FAIRWEATHER	231 ft.- II	180	Seattle, Washington
MT. MITCHELL	231 ft.- II	180	Norfolk, Virginia
DAVIDSON	175 ft.-III	180	Seattle, Washington
WHITING**	163 ft.-III	112	Norfolk, Virginia
PEIRCE*	163 ft.-III	60	Norfolk, Virginia
RUDE	90 ft.- V	180	Norfolk, Virginia
HECK	90 ft.- V	180	Norfolk, Virginia

Fisheries Research and Assessment - 1,897 DAS

Ship	Length-Class	DAS	Home Port
MILLER FREEMAN*	215 ft.- II	96	Seattle, Washington
ALBATROSS IV	187 ft.-III	243	Woods Hole, Massachusetts
McARTHUR*	175 ft.-III	100	Seattle, Washington
OREGON II	170 ft.-III	243	Pascagoula, Mississippi
DAVID STARR JORDAN	171 ft.- IV	243	San Diego, California
TOWNSEND CROMWELL	164 ft.- IV	243	Honolulu, Hawaii
DELAWARE II	156 ft.- IV	243	Woods Hole, Massachusetts
CHAPMAN	127 ft.- IV	180	Pascagoula, Mississippi
JOHN N. COBB	94 ft.- V	166	Seattle, Washington
MURRE II	86 ft.- VI	140	Juneau, Alaska

Oceanography and Marine Assessment - 469 DAS

Ship	Length-Class	DAS	Home Port
OCEANOGRAPHER*	303 ft.- I	40	Seattle, Washington
DISCOVERER*	303 ft.- I	18	Seattle, Washington
SURVEYOR*	292 ft.- I	40	Seattle, Washington
MILLER FREEMAN*	215 ft.- II	127	Seattle, Washington
McARTHUR*	175 ft.-III	64	Seattle, Washington
FERREL	133 ft.- IV	180	Norfolk, Virginia

Oceanographic and Atmospheric Research - 451 DAS

Ship	Length-Class	DAS	Home Port
OCEANOGRAPHER*	303 ft.- I	140	Seattle, Washington
RESEARCHER	278 ft.- I	210	Miami, Florida
DISCOVERER*	303 ft.- I	57	Seattle, Washington
MILLER FREEMAN*	215 ft.- II	20	Seattle, Washington
McARTHUR*	175 ft.-III	16	Seattle, Washington
PEIRCE*	163 ft.-III	8	Norfolk, Virginia

* Vessels shared by two or more programs
** Includes 52 DAS on NOAA/Navy cooperative project

These ships are staffed by NOAA Corps Commissioned Officers, Wage Marine Employees, and General Schedule Technicians. They are deployed for multi-program or specialized use depending on size, range, laboratory space, equipment, and accommodations. The Class I and II ships have the necessary size, endurance and equipment to conduct surveys and investigations in the deep ocean outward from the continental shelf or in remote areas such as Alaska. The smaller Class III, IV, V and VI ships were designed for continental shelf and near shore operation.

Ship maintenance and support services -- This program provides centralized management and coordination, scheduling, repair, maintenance, port services, labor relations, operations procedures and engineering for fleet maintenance.

The Atlantic Marine Center (AMC) in Norfolk, Virginia, is home port for six ships; it provides docks, maintenance, stores, supplies, repair facilities, data processing facilities and administrative support. The Southeast Marine Support Facility in Miami, Florida, under the operational control of AMC, is the RESEARCHER's home port. Four fisheries ships are operated out of Woods Hole, Massachusetts, and Pascagoula, Mississippi. Two ships, PEIRCE and WHITING, are proposed for deactivation and will be maintained at AMC during FY 1986. The Pacific Marine Center (PMC) in Seattle, Washington, is home port for eight ships. Three fisheries ships are operated out of San Diego, California; Honolulu, Hawaii; and Juneau, Alaska.

Headquarters in Rockville, Maryland, coordinates the development of annual ship operating schedules; updates long-range plans for new ship construction, inspection, rehabilitation, repair, maintenance, and operations; manages marine personnel labor relations (maritime unions); updates standard fleet procedures; carries out inspections; completes engineering for ship systems upgrade; procures equipment and systems; and provides diver training and certification.

The vessels of the NOAA fleet and the onboard equipment represent a large capital investment which require proper maintenance to avoid large outlays for repair or replacement construction. A continuing level of adequate maintenance ensures the readiness, reliability, and effectiveness of the fleet and thus NOAA's capability to meet commitments in carrying out marine programs.

Most of the total ship repair and maintenance cost is for shipyard contractual services; the balance is for procuring material. Necessary maintenance varies for each ship from year to year depending on mission and installed machinery. Major engine overhauls and drydockings are required approximately every 3 years, whereas other overhauls, maintenance, testing, or repair to vessel hull, machinery, electrical, electronic systems and equipment occur on a more frequent basis. Mid-life rehabilitation commenced on the seventh ship scheduled for rehabilitation.

The NOAA Diving program conducts the following activities: continues diver training of NOAA program personnel; inspects vessels and shore facilities to insure diver safety; continues inspection and certification of advanced NOAA sponsored underwater systems; and maintains and operates six operational recompression chambers.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Ship Operations			
Number of active ships	22	23*	11
Ship Maintenance and Support Services			
Number of active ships maintained	22	23*	11
Number of inactive ships	1	3*	12
Number of ships, rehabilitation completed	5	6	7
Diver training classes conducted	16	16	16

* Includes three vessels (PEIRCE, WHITING, and OCEANOGRAPHER) that were in both active/inactive status during FY 1986.

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ship operations	579 (606)	$35,207	434 (465)	$26,104	-145 (-141)	-$9,103

A decrease of 145 positions and $9,103,000 is proposed. It includes:

A reduction of 30 days-at-sea (DAS) is proposed for the RESEARCHER ($500,000), and 63 DAS for of the MILLER FREEMAN (3 positions/$312,000). These ships will continue to operate at 180 DAS, the current operating level of the nautical charting vessels.

Personnel savings of 26 positions and $800,000 are associated with the ship reductions.

The deactivation of the McARTHUR (25 positions/$1,450,000), the WHITING (21 positions/$1,200,000), and the FERREL (11 positions/$700,000) is proposed. The McARTHUR and FERREL conducted circulatory surveys on the west and east coasts. They are no longer required, as modeling techniques can be used to determine circulatory patterns. The WHITING should be deactivated, as hydrographic surveys for the East Coast and Great Lakes can be conducted more economically and efficiently using field party launches.

A decrease of 59 positions and $4,141,000 is requested for eight fishery research vessels: the ALBATROSS IV, OREGON II, DAVID STARR JORDAN, TOWNSEND CROMWELL, DELAWARE II, CHAPMAN, JOHN N. COBB, and MURRE II. NOAA proposes to provide ship time for fisheries research by chartering commercial vessels, which will result in a substantial cost savings. NMFS will contract for necessary vessel support to conduct research and stock assessments. NOAA fisheries vessels selected for deactivation may continue to be operated if this proves to be more cost effective than chartering. This mix of charter and active vessels provides sufficient ship time to carry out NMFS regional research and stock assessments. The table below summarizes these changes.

Fisheries Fleet Changes
(excluding MILLER FREEMAN)

	Ship Operations		Ship Maintenance and Support Services		Total	
	Pos.	Amount	Pos.	Amount	Pos.	Amount
1987 Fisheries fleet base	110	$7,394	14	$2,470	124	$9,864
Charter savings	-59	-4,141	-11	-1,385	-70	-5,526
Amount available for chartering activities	51	3,253	3	1,085	54	4,338

Deactivation of the ten ships and the DAS reduction will result in a total reduction of 2,514 DAS.

The position and object class detail for this decrease follows:

	Number	Annual Salary Decrease	Location
	-44	-$1,019,358	Norfolk, VA
	-49	-1,208,223	Seattle, WA
	-18	-416,678	Pascagoula, MS
	-14	-387,378	Woods Hole, MA
	-12	-276,323	Honolulu, HI
	-6	-180,058	San Diego, CA
	-2	-76,491	Juneau, AK
Total salaries	-145	-3,564,509	
Other personnel compensation		-1,601,991	
Total compensation		-5,166,500	
Personnel benefits		-571,500	
Travel and transportation of persons		-18,000	
Transportation of things		-12,000	
Rent, communications, and utilities		-86,500	
Printing and reproduction		-5,700	
Other services		-142,400	
Supplies and materials		-3,008,900	
Equipment		-91,500	
Total		-9,103,000	

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ship maintenance and support services	96 (104)	$22,330	82 (92)	$21,407	-14 (-12)	-$923

A net decrease of 14 positions and $923,000 is proposed and includes five components.

An increase of $1,100,000 is requested to purchase two multi-beam bathymetric survey systems for NOAA ships. The interest in oil and gas exploration of the outer continental shelf has placed new demands on NOAA to furnish detailed bathymetric survey data for the Atlantic margin. In addition, detailed bathymetric surveys of the Exclusive Economic Zone (EEZ) cannot be provided effectively with existing systems. To meet the demand for deep water bathymetric information, NOAA has developed new tools, techniques, and technologies. In FY 1980, the Narrow Beam Echo Sounder (NBES) system aboard the NOAA Ship SURVEYOR was modified to a multi-beam swath survey configuration known as SEABEAM. Using this survey capability, NOAA has become the nonmilitary leader in revolutionizing the study of seafloor features. The funding for the multi-beam bathymetric survey systems are:

(Dollars in Thousands)

FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
$1,100	$1,100	$100	$100	$100

Savings of 11 positions and $1,155,000 are available because the proposed ship reductions (described above) will reduce fleet maintenance costs.

A reduction of three positions and $300,000 is requested to close the Southeast Marine Support Facility in Miami, Florida. The Southeast Marine Support facility is principally used by ships working with NOAA's Atlantic Oceanographic and Meteorological Laboratories (AOML) and the Southeast Fisheries Center. The RESEARCHER can continue to inport at Miami for staging of these projects.

A reduction of $568,000 is proposed to: (1) adjust the NOAA Fleet Rehabilitation Program to the proposed fleet size ($368,000), and (2) eliminate the Global Positioning System Study funds ($200,000) because the study has been completed.

The position and object class detail for this net decrease follows:

	Number	Annual Salary Decrease	Location
	-3	-$40,060	Miami, FL
	-1	-34,839	Pascagoula, MS
	-5	-120,983	Norfolk, VA
	-1	-18,577	Honolulu, HI
	-1	-33,897	LaJolla, CA
	-2	-61,705	Seattle, WA
	-1	-18,577	Woods Hole, MA
Total salaries	-14	-328,638	
Other personnel compensation		-11,962	
Total compensation		-340,600	
Personnel benefits		-56,300	
Travel and transportation of persons		-10,000	
Transportation of things		+3,000	
Rent, communications, and utilities		-182,000	
Printing and reproduction		-3,000	
Other services		-786,200	
Supplies and materials		-419,900	
Equipment		+872,000	
Total		-923,000	

Additional Resource Information

Resources for sub-line item detail are reflected below:

	1985 Actual		1986 Currently Available		1987 Estimate	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Ship maintenance and support services Diver Training, Safety, and Efficiency	4	$474	4	$497	4	$497

Activity: Program support
Subactivity: Aircraft services

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Aircraft operations and maintenance..........	84	$13,842	89	$15,805	71	$13,894	71	$14,694	...	+$800
	(86)	(13,714)	(92)	(16,017)	(74)	(13,894)	(74)	(14,694)	(...)	
Total requirements..........................	84	13,842	89	15,805	71	13,894	71	14,694	...	+800
	(86)	(13,714)	(92)	(16,017)	(74)	(13,894)	(74)	(14,694)	(...)	

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To operate a fleet of aircraft to support NOAA's missions in: (1) monitoring and predicting weather and environmental conditions for the protection of life and property; (2) research to advance oceanic and atmospheric technology for the better management of the environment and the rational use of our national resources; (3) aerial surveys to support the nautical and aeronautical charting programs (4) aerial surveys for flood forecasts; and (5) airborne logistic support to various scientific programs.

Objectives: To support NOAA's research and development programs to improve weather, marine, and climate services; to support the programs for nautical and aeronautical charting and river flood forecasting; to provide weather reconnaissance support to NOAA programs. Federal agencies, and international programs approved by the Administrator.

Base Program

The Office of Aircraft Operations (OAO) was established in October 1984, to consolidate the management of all aircraft used by NOAA. Twelve aircraft located throughout the United States are managed by OAO at Miami International Airport in Florida. The OAO is responsible for aircraft operations, services, and related functions in:

Aerial Weather Reconnaissance -- NOAA reimburses the Department of Defense for aerial weather reconnaissance performed by the United States Air Force. This includes hurricane reconnaissance from the international dateline, east to 55 degrees west longitude and winter storm reconnaissance in the Gulf of Mexico and along the east coast of the United States. NOAA also conducts programs to educate the general public and the military in weather emergencies, especially hurricane warnings, through conferences, seminars, workshops, publications and personal contacts.

Photogrammetric Operations -- NOAA conducts specialized aerial surveys and provides aerial photographs for the production of shoreline maps, shoreline revision data, nearshore bathymetric data for nautical charts, geodetic control establishment and storm evacuation routes, to position landmarks and aids to navigation, and to support other NOAA activities such as natural disaster damage assessment.

OAO administers, the operations of these aircrafts. The aircraft, are leased, their operations and maintenance are funded reimbursable from FAA and from temporary transfers from the NOS Coastal Mapping program.

Gamma Snow Survey Program -- OAO conducts an Airborne Snow Survey Program to obtain soil moisture and snow water equivalent data from a network of 350 flight lines OAO provides the data to the National Weather Service (NWS) River Forecast Centers in Kansas City and Minneapolis, for use in issuing river and flood forecasts as part of the NWS Hydrologic Service Program.

Aeronautical Charting Operations -- This program conducts critical, comprehensive aerial reviews of NOAA-produced aeronautical charts depicting the National Airspace System. Specialized products required for safety of flight (Minimum Safe Altitude Warning data and precise obstruction location information) are gathered to ensure safety of air travel.

Aircraft services administers the operations of the aircraft supporting this program. The aircraft, which are leased, are funded on a reimbursable basis from FAA and the NOS aeronautical charting program. These funds also include scheduled maintenance expenses.

Helicopter Support -- This unit performs various duties in support of NOAA, including the Outer Continental Shelf Environment Assessment Program (OSCEAP), National Ocean Service, National Marine Fisheries Service, and other NOAA activities. This program includes four helicopters, which are expected to fly 1,400 hours in FY 1986.

Operations and scheduled maintenance for the four helicopters (acquired from DOD), are funded by the various programs requiring helicopter support.

Atmospheric and Oceanographic Reconnaissance Operations and Research - NOAA's two fully-instrumented WP-3D research aircraft are the most sophisticated meteorological research platforms in the world. The aircraft research systems, and the navigation system, provide detailed spatial and temporal observations of a wide range of atmospheric and oceanic parameters. OAO develops and calibrates specialized instrumentations, integrates user-supplied instruments into the automated systems, and processes and analyzes data sets obtained from various field programs. This Line item also funds management of all NOAA aircraft operations.

OAO aircraft provide high density/accuracy hurricane data to the National Hurricane Center in near real-time. Storm data are transmitted via the aircraft satellite data link to upgrade forecasting models of hurricane track/intensity. Because of this capability, the OAO has primary responsibility for reconnaissance of hurricanes within 24 hours of landfall on the United States or its territories. The OAO also augments reconnaissance by DOD aircraft on developing tropical storms and provides hurricane reconnaissance over foreign airspace where military aircraft may be prohibited.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Flight hours flown (all aircraft)........	4,580	4,550	4,550

Changes for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Aircraft operations and maintenance	71 (74)	$13,894	71 (74)	$14,694	... (...)	+$800

The 1985 Congressional add-on of $1,300,000 (object class 25.0) is not needed in 1987. Remaining funds are adequate for standard maintenance and operations of NOAA's aircraft.

An increase of $400,000 (object class 25.0) is requested for standard aircraft maintenance. In FY 1987 these funds will be used for an airframe structural overhaul of one of NOAA's WP-30 Orion aircraft. This overhaul is required in set intervals to ensure the safety of the aircraft.

An increase of $1,700,000 (object class 25.0) is requested to provide NOAA's 30 percent share of a cooperative effort with USAF to upgrade hurricane reconnaissance instruments. The instruments are on USAF aircraft that NOAA uses to fly hurricane reconnaissance outside of 24 hours of landfall.

Summary of Requirements by Object Class
(dollar amounts in thousands)

Appropriation: Operations, research, and facilities

		1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			Emp.
	Object class	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
11.1/3	Personnel compensation	10,000	10,639	$346,495	9,315	9,993	$324,073	-685	-646	-$22,422	12,417
11.5	Other personnel compensation	...	...	21,547	...	...	19,739	...	...	-1,808	...
	Total	10,000	10,639	368,042	9,315	9,993	343,812	-685	-646	-24,230	12,417
	Other objects:										
12	Personnel benefits			51,482			48,851			-2,631	
13	Benefits for former personnel			5,412			5,412			...	
21	Travel and transportation of persons			16,798			15,624			-1,174	
22	Transportation of things			4,727			4,478			-249	
23	Rent, communications and utilities:										
23.1	Standard level user charges			23,152			21,878			-1,274	
23.2	Other rent, communications, and utilities			48,464			48,133			-331	
24	Printing and reproduction			2,920			2,766			-154	
25	Other services			435,253			312,568			-122,685	
26	Supplies and materials			39,817			34,223			-5,594	
31	Equipment			35,049			36,550			+1,501	
41	Grants, subsidies, and contributions			56,531			28,270			-28,261	
42	Insurance claims and indemnities			14			14			...	
	Total requirements			1,087,661			902,579			-185,082	

Justification by Object Class
(dollar amounts in thousands)

Object class		1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			Emp.
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	12/31
11.1/3	Total positions										
	Executive schedule	3	3	$222	3	3	$222	...	...	...	3
	Senior Executive Service	124	124	8,547	120	120	8,271	-4	-4	-$276	109
	General schedule	8,910	9,489	309,007	8,345	8,960	290,089	-565	-529	-18,918	11,213
	Commissioned officers	399	378	11,633	399	378	11,633	...	...	...	372
	Wage board/wage marine	558	636	16,536	442	524	13,338	-116	-112	-3,198	688
	P.L. 80-313	6	6	412	6	6	412	...	...	...	6
	Consultants and experts	...	3	138	...	2	108	...	-1	-30	26
	Total, positions	10,000	10,639	346,495	9,315	9,993	324,073	-685	-646	-22,422	12,417
11.5	Other personnel compensation										
	Overtime			11,266			10,052			-1,214	
	Cash awards			1,262			1,262			...	
	Other			9,019			8,425			-594	
	Total, other personnel compensation			21,547			19,739			-1,808	
12.1	Personnel benefits:										
	Civil Service retirement			23,424			21,935			-1,489	
	Federal Insurance Contributions Act (FICA)			2,370			2,032			-338	
	Health Insurance			10,882			10,420			-462	
	Life Insurance			1,426			1,321			-105	
	Overseas allowances			3,788			3,728			-60	
	Employees compensation fund			2,652			2,652			...	
	Medicare			4,248			4,248			...	
	Other			2,692			2,515			-177	
	Total, personnel benefits			51,482			48,851			-2,631	

Object class		1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			Emp. 12/31
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
13.0	Benefits for former personnel										
	Benefits for retired NOAA Corps Officers..			$4,770			$4,770			...	
	Health care for retired NOAA Corps Officers..................................			440			440			...	
	Other....................................			202			202			...	
	Total, benefits for former personnel....			5,412			5,412			...	
21.0	Travel and transportation of persons										
	Aircraft rental...........................			15			15			...	
	GSA vehicles..............................			816			792			-24	
	Administrative travel.....................			5,986			5,610			-376	
	Program travel............................			9,981			9,207			-774	
	Total, travel and transportation of persons..............................			16,798			15,624			-1,174	
22.0	Transportation of things										
	Transportation of household goods.........			1,541			1,433			-108	
	GSA trucks................................			1,356			1,337			-19	
	Other.....................................			1,830			1,708			-122	
	Total, transportation of things.........			4,727			4,478			-249	
23.1	Standard level user charges...............			23,152			21,878			-1,274	
23.2	Other rent, communications, and utilities										
	Rent payments to other than GSA...........			6,071			5,944			-127	
	Utility services..........................			7,120			6,850			-270	
	Aircraft charter..........................			483			483			...	
	Vessel charter............................			1,296			1,374			+78	
	Rental of office copying equipment........			1,130			1,125			-5	
	Rental of automatic data processing equipment...............................			3,902			3,736			-166	
	Federal Telecommunications System.........			4,727			4,727			...	
	Other communication services..............			20,400			20,457			+57	
	Postal services by USPS...................			2,676			2,676			...	
	Other.....................................			659			761			+102	
	Total, other rent, communications and utilities............................			48,464			48,133			-331	
24.0	Printing and reproduction										
	Publications..............................			1,729			1,668			-61	
	Other.....................................			1,191			1,098			-93	
	Total, printing and reproduction........			2,920			2,766			-154	

Object class		1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			Emp. 12/31
		Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
25.0	Other services										
	Aircraft repair			$583			$583			...	
	Vessel repair			13,194			13,898			+$704	
	Contracts for research			20,172			6,344			-13,828	
	Maintenance of equipment			8,069			7,629			-440	
	University training			537			531			-6	
	Other training			1,135			1,064			-71	
	Substation observers (contractual)			1,392			1,392			...	
	Other Federal agencies			237,281			172,312			-64,969	
	Contracts for consulting services			386			250			-136	
	GSA alterations and repairs			759			755			-4	
	Civil Service commission training			195			183			-12	
	Working capital fund			8,554			8,554			...	
	Other miscellaneous services			142,996			99,073			-43,923	
	Total, other services			435,253			312,568			-122,685	
26.0	Supplies and materials										
	Chart paper			1,031			1,031			...	
	Meteorological upper air supplies			4,027			3,962			-65	
	Maintenance of vessels			1,609			1,031			-578	
	Gases (helium, hydrogen)			634			634			...	
	Fuel			5,741			3,825			-1,916	
	ADP supplies			1,781			1,781			...	
	Other			24,994			21,959			-3,035	
	Total, supplies and materials			39,817			34,223			-5,594	
31.0	Equipment										
	Office machines and equipment			878			874			-4	
	ADP equipment			18,842			19,478			+636	
	Operating program equipment (capitalized)			13,187			12,423			-764	
	Non-capitalized			2,142			3,775			+1,633	
	Total, equipment			35,049			36,550			+1,501	
41.0	Grants, subsidies and contributions			56,531			28,270			-28,261	
42.0	Insurance claims and indemnities			14			14			...	

Appropriation: Operations, research, and facilities

Personnel Summary

	1985 Actual	1986 Estimate	1987 Estimate
Total number of full-time permanent positions	11,273	11,012	9,315
Total compensable workyears:			
Full-time equivalent employment	11,724	11,629	9,993
Full-time equivalent of overtime and holiday hours	425	425	425
Average ES salary	$67,687	$67,687	$67,687
Average GS grade	9.75	9.75	9.75
Average GS salary	$32,681	$32,681	$32,681
Average salary of ungraded positions	$27,640	$27,955	$27,955

Appropriation: Operations, research, and facilities

Consulting and Related Services
(obligations in thousands of dollars)

	1985 Actual	1986 Estimate	1987 Estimate
Consulting services	$333	$596	$358
Management and professional services	568	475	347
Special studies and analyses	4,947	5,395	4,445
Management and support services for research and development	10	69	
Total	5,858	6,535	5,150
"Amount withheld from obligations pursuant to P.L. 99-190"	...	~~-352~~ -654	...

A decrease of $1,385,000 for consulting and related services is part of the total NOAA decrease for FY 1987. The following is a brief description by activity of the remaining services required:

Ocean and coastal program ($528,000) - Consulting services are required as technical support for the National Marine Pollution Program. Management and professional services will be used to develop, implement, and maintain ADP systems. Special studies and analyses are required for support and management of six National Marine Sanctuaries.

Marine fishery resource programs ($3,905,000) - Consulting services are required for ADP systems analysis, biological modeling of specific or groups of fisheries, and socioeconomic analysis of various fishery management plans. Management and professional services are used for fishery management programs. Special studies and analyses are required for better management of fisheries, marine mammals, endangered species and for Marine Recreational Fishery activities.

Atmospheric programs ($50,000) - Special studies and analyses are required for ADP communication systems analyses.

Satellite and environmental data and information services ($400,000) - Management and professional services are required for ongoing A-76 studies. Special studies and analyses are required for the Assessment and Information Services Center.

Program support ($267,000) - Consulting services are required for Extension Program activities, speech writers, and for expert witnesses in law suits. Management and support services are required to support the National Academy of Sciences' Board on Ocean Science Policy, and for advertising and financial/auditing services for NOAA Commissioned Officers. Special studies and analyses are for a facilities consolidation study.

Appropriation: Operations, research, and facilities

Periodicals, Pamphlets, and Audiovisual Products
(obligations in thousands of dollars)

	1984 Actual	1985 Actual	1986 Estimate	1987 Estimate
Periodicals	$918	$1,007	$1,238	$1,174
Pamphlets	448	411	405	408
Audiovisuals	533	127	182	132
Total	1,899	1,545	1,825	1,714

An decrease of $111,000 for periodicals, pamphlets, and audiovisual products is part of the total NOAA decrease for FY 1987.

Ocean and coastal programs ($497,000) - Expenditures are for National Geodetic Survey, National Marine Pollution Program and Ocean Services program periodicals; and Ocean Services program pamphlets and audiovisuals.

Marine fishery resource programs ($604,000) - Expenditures are for periodicals (market news reports, fishery bulletins, regional newsletters, and the National Marine Fishery Service Review) and pamphlets on inspection and grading and domestic/export marketing.

Atmospheric programs ($243,000) - Expenditures are for weekly preliminary reports and forecasts of solar-geophysical activity and assorted weather service charts, maps, bulletins, newsletters, and reports on climate, fire weather, floods, hurricanes, tornadoes, winter storms, etc.

Satellite and environmental data and information services ($235,000) - Expenditures are for technical data periodicals in meteorology, oceanography, solid-earth geophysics, solar-terrestrial physics, and satellite meteorology. The National Environmental Satellite and Information Service also publishes scientific and technical pamphlets which report the results of operational, developmental, and research programs of NOAA, and manuals for the operational programs of the agency. Audiovisual products are primarily slides and viewgraphs used for technical presentations of operational programs at academic and professional society meetings.

Program support ($135,000) - Expenditures are for the NOAA magazine to acquaint readers with the policies and programs of the agency; pamphlets on work activities, marine mammals and fish species; and audiovisuals on the Commissioned Officer Corps and public service announcements.

Justification of Program and Performance

Appropriation: Promote and Develop Fishery Products and Research Pertaining to American Fisheries
(Saltonstall-Kennedy Fund)

1985

In FY 1985, a total of $34,951,000 was transferred from the Department of Agriculture to NOAA. Of that amount, $25,900,000 was used to offset Operations, research, and facilities appropriation requirements for marine fishery resource programs. The remaining $9,051,000 in the S-K account provided assistance grants for the development of the U.S. fishing industry.

1986

In FY 1986, the S-K transfer from the Department of Agriculture to NOAA is $43,707,000. Of this amount, $35,700,000 will be used to offset Operations, research, and facilities appropriation requirements for marine fishery resource programs. The remaining $8,007,000 will be used to provide assistance grants for the development of the U.S. fishing industry.

1987

In FY 1987, the S-K transfer from the Department of Agriculture to NOAA is estimated to be $46,000,000. NOAA proposes that the entire transfer be used to offset current definite appropriation requirements for Operations, research, and facilities. Marine fishery resource programs provide resource data to the industry, management regulations to ensure that a continued renewable resource is available for industry, and allocations of resources that favor U.S. fishermen and not foreign fishermen. Industry should provide funding for specific development activities as appropriate.

Justification and Program Performance

Appropriation: Fishing Vessel and Gear Damage Compensation Fund

1985

No appropriation was requested for the Fishing Vessel and Gear Damage Compensation Fund (FVGDCF) in FY 1985. However, $5,315,017 was available from carryover in FY 1984 to pay claims and administrative expenses during FY 1985. The end-of-year balance in the FVGDCF available for obligation in FY 1986 was $4,162,267.

1986

No appropriation was requested for the FVGDCF in FY 1986. However, carryover from FY 1985 totalling $4,162,267 was available to pay claims and administrative expenses in FY 1986. The estimated end-of-year unobligated balance in the FVGDCF is $1,102,267.

1987

The FVGDCF is being proposed for termination in FY 1987. Any unobligated and unappropriated balances in the Fund will be transferred to the General Fund of the Treasury.

Appropriation Summary Statement

Appropriation: Fishermen's Contingency Fund

Title IV of the Outer Continental Shelf Lands Act Amendments of September 18, 1978, (P.L. 95-372, Section 492) as amended established the Fishermen's Contingency Fund. The fund is to be used by the Secretary of Commerce to compensate domestic fishermen for the damage or loss of fishing gear, and any resulting economic loss due to natural obstructions or man-made obstructions related to oil and gas exploration, development, and production in any area of the outer continental shelf.

For purposes of administration, the Secretary of Commerce is authorized to establish the Fishermen's Contingency Fund for the purpose of paying claims and to request assessment by the Secretary of the Interior of the oil and gas industry to capitalize the Fund. Any holder of a lease, an exploration permit, easement, or right of way on the outer continental shelf is required to pay to the Secretary of the Interior an amount not to exceed $5,000 per lease, permit, easement, or right of way per calendar year. The Secretary of the Interior will deposit these collections in the Fishermen's Contingency Fund established by the Secretary of Commerce.

Title IV stipulates that amounts available can be disbursed only to the extent provided for by appropriations acts.

Justification of Proposed Language Changes

1. Delete all language.

   This program is proposed for termination in FY 1987 and appropriation language is no longer necessary.

Summary of Requirements
(dollar amounts in thousands)

Appropriation: Fishermen's Contingency Fund

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			1 (2)	$750

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-) Over 1987 Base	
	Comparison by activities:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Fishermen's Contingency Fund:										
NOAA-151	Administrative expenses	1 (1)	$25	1 (2)	$60	1 (2)	$60	... (...)	...	-1 (-2)	-$60
NOAA-151	Payment of claims	... (...)	725	... (...)	690	... (...)	690	... (...)	...	... (...)	-690
	Total requirements	1 (1)	750 (537)	1 (2)	750 (750)	1 (2)	750 (750)	... (...)	...	-1 (-2)	-750

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Justification of Program and Performance

Activity: Fishermen's Contingency Fund
Subactivity: Fishermen's Contingency Fund

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Administration expenses......................	1	$25	1	$60	1	$60	...	...	-1	-$60
	(1)		(2)		(2)		(...)		(-2)	
Payment of claims............................	...	725	...	690	...	690	...	...	...	-690
	(...)		(...)		(...)		(...)		(...)	
Total requirements...........................	1	750	1	750	1	750	...	...	-1	-750
	(1)	(537)	(2)	(750)	(2)	(750)	(...)		(-2)	

Note: Permanent position amounts in parentheses represent workyears and dollar amounts in parentheses represent obligations.

Goals and Objectives

Goals: Compensate domestic fishermen for damage or loss of fishing gear due to obstructions related to oil or gas exploration, development, and production on the Outer Continental Shelf (OCS).

Objectives: Minimize financial instability of the fishing industry caused by competing uses of the OCS. Provide for timely resolution of claims by vessel owners. Administer the Fund's resources efficiently and effectively.

Base Program

The Fishermen's Contingency Fund is authorized under Section 402 of Title IV of the Outer Continental Shelf Lands Act Amendments of 1978. NOAA compensates U.S. commercial fishermen for damage or loss of fishing gear, and resulting economic loss caused by obstructions related to oil and gas exploration, development, and production in any area of the Outer Continental Shelf. The funds used to provide this compensation are derived from fees collected on an annual basis by the Secretary of the Interior from the holders of leases, exploration permits, easements, or rights-of-way on the OCS.

Although the Fund is totally supported through user fees, disbursements can be made only to the extent authorized in appropriation acts.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Number of claims received	193	200	...
Number of claims processed	121	175	...

Decrease for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fishermen's Contingency Fund	1 (2)	$750	... (...)	...	-1 (-2)	-$750

NOAA requests a decrease of one position and $750,000 to terminate disbursement of funds for payment of claims under Title IV of the Outer Continental Shelf Lands Act Amendments of 1978 as amended. The decrease in the budget request in FY 1987 for the Fishermen's Contingency Fund will enable NOAA to terminate this program. Balances remaining in the Fund at the end of FY 1986 would be rebated to current leaseholders who were assessed.

Summary of Requirements by Object Class
(dollar amounts in thousands)

Appropriation: Fishermen's Contingency Fund

Object class	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			Emp. 12/31
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11 Total personnel compensation	1	2	$16	...	...	...	-1	-2	-$16	1
Other objects:										
12.1 Personnel benefits			3			...			-3	
23.2 Communications, utilities and other rent			1			...			-1	
25.0 Other services			10			...			-10	
26.0 Supplies and materials			1			...			-1	
31.0 Equipment			29			...			-29	
42.0 Insurance claims and indemnities			690			...			-690	
Total requirements			750			...			-750	

Justification by Object Class
(dollar amounts in thousands)

Object class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount	Emp. 12/31
11.0 Total positions										
General Schedule	1	2	$16	...	...	...	-1	-2	-$16	1
12.1 Personnel benefits										
Civil Service retirement			2			...			-2	
Health Insurance			1			...			-1	
Total, personnel benefits			3			...			-3	
23.2 Communications, utilities and other rent			1			...			-1	
25.0 Other services			10			...			-10	
26.0 Supplies and materials			1			...			-1	
31.0 Equipment			29			...			-29	
42.0 Insurance claims and indemnities			690			...			-690	

Appropriation: Fishermen's Contingency Fund

Personnel Summary

	1985 Actual	1986 Estimate	1987 Estimate
Total number of full-time permanent positions	1	1	...
Total compensable workyears: Full-time equivalent employment	1	2	...
Average GS grade	9.75	9.75	...
Average GS salary	$32,681	$32,681	...

1086

Appropriation Summary Statement

Appropriation: Foreign Fishing Observer Fund

The Foreign Fishing Observer Fund was originally established by Public Law 96-339, which amended the Atlantic Tuna Convention Act of 1975. The Fund now also includes the Observer Program provided for by the Magnuson Fishery Conservation and Management Act as amended (P.L. 94-265). Under these laws, U.S. observers are placed aboard foreign fishing vessels fishing within the Fishery Conservation Zone (FCZ) of the United States to monitor compliance with U.S. fishery laws and collect data used to manage U.S. fisheries. The Fund is financed through fees imposed on owners and operators of the foreign fishing vessels that fish within the FCZ. The Foreign Fishing Observer Fund is to be used by the Secretary of Commerce to pay salaries, administrative costs, and data management costs associated with full observer coverage aboard foreign fishing vessels. In addition, beginning in FY 1985, foreign fishermen have the ability to contract directly with approved contractors to obtain observers.

16 USC 1827 stipulates that the amounts available in the Fund can be disbursed only to the extent and in the amounts provided for in advance in appropriation acts.

Appropriation Language and Code Citations:

For expenses necessary to carry out the provisions of the Atlantic Tunas Convention Act of 1975, as amended, (Public Law 96-339), the Magnuson Fishery Conservation and Management Act of 1976, as amended (Public Law 94-265 and P.L. 97-453) and the American Fisheries Promotion Act, (Public Law 96-561), there are monies appropriated from the fees imposed under the Foreign Fishing Observer Program authorized by these Acts, not to exceed $2,000,000, to remain available until expended.

16 USC 1824(b)(10)

"Reasonable fees shall be paid to the Secretary by the owner or operator of any foreign fishing vessel for which a permit is issued.."

16 USC 1827

16 USC 1827 authorizes the Secretary to establish a program under which a U.S. observer will be stationed aboard each foreign fishing vessel while that vessel is in waters within the fishery conservation zone equivalent to the exclusive economic zone (EEZ) established under section 101 of the Act of 1976, and the convention area as defined in Article I of the International Convention for the Conservation of Atlantic Tunas; and is taking or attempting to take any species of fish if such taking or attempting to take may result in the incidental taking of billfish. 16 USC 1827 also establishes the Foreign Fishing Observer Fund in the Treasury of the United States and provides that payments made by the Secretary to carry out this section be paid from the Fund only to the extent and amounts provided for in advance in appropriation acts.

Summary of Requirements
(dollar amounts in thousands)

Appropriation: Foreign Fishing Observer Fund

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			4 (36)	$4,500

		1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-) Over 1987 Base	
	Comparison by activities:	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
	Foreign Fishing Observer Fund:										
NOAA-159	Total requirements	4 (51)	$4,500 (4,400)	4 (36)	$4,500 (4,831)	4 (36)	$4,500 (4,500)	4 (36)	$2,000 (2,000)	... (...)	-$2,500

Note: Permanent position amounts in parentheses represent workyears and dollar amounts in parentheses represent obligations.

Justification of Program and Performance

Activity: Foreign Fishing Observer Fund
Subactivity: Foreign Fishing Observer Fund

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Foreign fishing observer fund...............	4 (51)	$4,500 (4,400)	4 (36)	$4,500 (4,831)	4 (36)	$4,500 (4,500)	4 (36)	$2,000 (2,000)	... (...)	-$2,500

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: Provide full observer coverage of foreign fishing vessels fishing within the EEZ of the United States. Increase compliance with fishery regulations and requirements. Support balanced conservation and management measures needed to achieve a continual optimum use of living marine resources.

Objectives: Collect data to determine foreign compliance with fishery regulations, and the status of fish stocks within the EEZ of the United States. Administer the base and supplemental observer programs in a cost-effective, efficient manner.

Base Program

The Foreign Fishing Observer Fund was authorized by Public Law 96-339, which amended the Atlantic Tuna Convention Act of 1975, and the American Fisheries Promotion Act of 1980, (Public Law 96-561), which amended the Magnuson Fishery Conservation and Management Act (MFCMA). The fund is financed through fees collected from foreign governments with fishing vessels fishing within the exclusive fishery jurisdiction of the United States. The fund is used by NOAA to pay salaries, administrative costs, data editing and entry costs, and other costs incurred in placing observers aboard foreign fishing vessels. This includes long-line vessels fishing in the Atlantic billfish and shark fishery and other foreign fishing vessels fishing within the EEZ of the United States. Such fishing requires a permit issued under the MFCMA. The observer program is conducted primarily through contracts with the private sector. NOAA places these observers aboard foreign fishing vessels to collect scientific information and to monitor compliance with the fishery management measures. Amounts available in the Fund can be disbursed only to the extent and in amounts provided for in advance in appropriation acts.

Beginning in FY 1985, Congress approved the establishment of a supplemental observer program. The program provided that foreign vessels without Federally provided observers will be required to obtain the services of private individuals certified by the Secretary of Commerce. This program has worked well over the past year.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Percent observer coverage of foreign fishing within the U.S. EEZ as required by the:			
- Atlantic Tuna Convention Act	100	100	100
- American Fisheries Promotion Act	95	100	100

NOTE: This performance data represents the combined impact of appropriated funds and direct contracting by foreign governments.

Decrease for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Foreign Fishing Observer Fund	4 (36)	$4,500	4 (36)	$2,000	... (...)	-$2,500

A decrease of $2,500,000 (object class 25.0) is proposed for this program. This will increase the use of contracts with the private sector and enable foreign vessel operators to have a greater opportunity to utilize the services of certified non-Federal observers. No adverse programmatic impact on the timeliness or quality of observer services are expected from this proposal.

Summary of Requirements by Object Class
(dollar amounts in thousands)

Appropriation: Foreign Fishing Observer Fund

Object class		1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount	Emp. 12/31
11	Personnel compensation	4	36	$1,027	4	36	$1,027	...	...	...	1
11.5	Other personnel compensation			102			102			...	
	Total	4	36	1,129	4	36	1,129	...	...	...	
	Other objects:										
12	Personnel benefits			103			103			...	
21	Travel and transportation of persons			44			44			...	
22	Transportation of things			1			1			...	
23.2	Communications, utilities and other rent			37			37			...	
24	Printing and reproduction			9			9			...	
25	Other services			3,119			619			-$2,500	
26	Supplies and materials			34			34			...	
31	Equipment			24			24			...	
	Total requirements			4,500			2,000			-2,500	

Justification by Object Class
(dollar amounts in thousands)

Appropriation: Foreign Fishing Observer Fund

Object class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount	Emp. 12/31
11.0 Total Positions										
General Schedule	4	36	$1,027	4	36	$1,027	...	...	...	1
11.5 Other personnel compensation			102			102			...	
12.1 Personnel benefits:										
Civil Service retirement			18			18			...	
Federal Insurance Contributions Act (FICA)			76			76			...	
Health Insurance			6			6			...	
Life Insurance			3			3			...	
Total, personnel benefits			103			103			...	
21.0 Travel and transportation of persons										
Program travel			44			44			...	
22.0 Transportation of things										
Other transportation			1			1			...	
23.2 Communications, utilities and other rent			37			37			...	
24.0 Printing and reproduction			9			9			...	
25.0 Other services										
Other training			20			20			...	
Maintenance of equipment			5			5			...	
All other			3,094			594			-$2,500	
Total, other services			3,119			619			-2,500	
26.0 Supplies and materials										
Operating program supplies			30			30			...	
General office supplies			4			4			...	
Total, supplies and materials			34			34			...	
31.0 Equipment										
Non-capitalized			24			24			...	

Personnel Summary

	1985 Actual	1986 Estimate	1987 Estimate
Total number of full-time permanent positions	4	4	4
Total compensable workyears:			
Full-time equivalent employment	51	36	36
Full-time equivalent of overtime and holiday hours	12	12	12
Average GS grade	9.75	9.75	9.75
Average GS salary	$32,681	$32,681	$32,681

Justification of Program and Performance

Appropriation: Fisheries Loan Fund

1985

The FY 1985 appropriation for the Fisheries Loan Fund was $2,500,000. During FY 1985, NOAA collected $46,005,800 in permit and poundage fees from foreign fishermen and deposited them in the Fisheries Loan Fund. The balance of receipts in the Fisheries Loan Fund at the end of the FY 1985 was $136,785,000.

1986

The FY 1986 appropriation for the Fisheries Loan Fund was zero. Portfolio management on loans previously made will continue and is funded in the ORF appropriation. During FY 1986, NOAA estimates that collections from permit and poundage fees will total $30,000,000. The estimated balance of receipts in the Fisheries Loan Fund at the end of FY 1986 is $179,585,000. In FY 1986, the end-of-year balance from FY 1985 has been invested and will earn approximately $12,800,000 in interest and is included in FY 1986 end of year balance.

1987

The FY 1987 budget proposes to transfer the FY 1986 end of year balance in the Fund ($179,585,000) to the general Fund of the Treasury. Legislation will be submitted to Congress that will eliminate the Fisheries Loan Fund, transfer portfolio management to the Office of Grants and Loan Administration in the Office of the Secretary. Repayments will be retained by the Department and future permit and poundage fees will be deposited in the General Fund of the Treasury. In addition, the unexpended balance in the Fund at the end of FY 1986 ($1,800,000) will be transferred to ORF to fund ETP dolphin research ($800,000) and fisheries laboratory maintenance ($1,000,000).

Appropriation Summary Statement

Appropriation: Fishermen's Guaranty Fund

The Fishermen's Guaranty Fund provides direct compensation to American vessel owners and crews for financial losses resulting from seizures of their vessels by foreign governments on the high seas or on the basis of rights or claims to territorial waters not recognized by the United States government. For FY 1987, NOAA is requesting appropriation authority to cover claim disbursements and administrative expenses of $1,800,000 from anticipated fee collections. Pursuant to 22 USC 1977, disbursements can be made only to the extent authorized in advance by appropriation acts. Legislation will be proposed to transfer the program to the Department of State in FY 1987.

Appropriation Language and Code Citations:

1. For expenses necessary to carry out the provisions of the Fishermen's Protective Act of 1967, as amended, $1,800,000 to be derived from the receipts collected pursuant to that Act, to remain available until expended. Legislation will be proposed to transfer the program to the Department of State in FY 1987.

22 USC 1977

"The Secretary ... shall enter into an agreement ... such agreement shall provide that, if said vessel is seized by a foreign country and detained ... the Secretary shall guarantee: (1) the owner of such vessel for all actual costs ...; (2) ... the actual market value of fish caught before seizure ...; and (3) the owner of such vessel and its crew for ... not to exceed 50 percentum of the gross income lost as a direct result of such seizure and detention."

Summary of Requirements
(dollar amounts in thousands)

Appropriation: Fishermen's Guaranty Fund

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			1 (2)	$3,000

Page No.	Comparison by activities:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Over 1987 Base Perm. Pos.	Inc.(+) or Dec.(-) Over 1987 Base Amount
	Fishermen's Guaranty Fund:										
NOAA-168	Administrative expenses	1 (1)	$19	1 (2)	$28	1 (2)	$28	... (...)	$28	-1 (-2)	...
NOAA-168	Payment of claims	... (...)	3,957	... (...)	2,972	... (...)	2,972	... (...)	1,772	... (...)	-$1,200
	Total requirements	1 (1)	3,976 (5,486)	1 (2)	3,000 (3,129)	1 (2)	3,000 (3,000)	... (...)	1,800 (1,800)	-1 (-2)	-1,200

Note: Permanent position amounts in parentheses represent workyears and dollar amounts in parentheses represent obligations.

Justification of Program and Performance

Activity: Fishermen's Guaranty Fund
Subactivity: Fishermen's Guaranty Fund

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Administration expenses	1 (1)	$19	1 (2)	$28	1 (2)	$28	... (...)	$28	-1 (-2)	...
Payment of claims	... (...)	3,957	... (...)	2,972	... (...)	2,972	... (...)	1,772	... (...)	-$1,200
Total requirements	1 (1)	3,976 (5,486)	1 (2)	3,000 (3,129)	1 (2)	3,000 (3,000)	... (...)	1,800 (1,800)	-1 (-2)	-1,200

Note: Permanent position amounts in parentheses represent workyears and dollar amounts in parentheses represent obligations.

Goals and Objectives

Goals: Compensate American vessel owners and crews for financial losses resulting from seizures of their vessels by foreign governments on the high seas on the basis of rights or claims to territorial waters not recognized by the United States.

Objectives: Minimize financial instability from confiscation of nets and/or fish by foreign governments. Provide for timely resolution of claims by vessel owners suffering economic losses resulting from the vessel seizures.

Base Program

The Fishermen's Guaranty Fund was established by the Fisherman's Protective Act of 1967 and operates under its most recent amendments. The program provides compensation to vessel owners and crews for financial losses resulting from seizures of United States fishing vessels by foreign governments on the high seas on the basis of rights or claims to territorial waters not recognized by the United States. Losses payable are generally limited to the market value of fish caught before seizure if they are spoiled or confiscated, and up to 50 percent of gross income lost as a direct result of such seizures. The resources of capital for the Fund are fees paid by vessel owners at rates established by NOAA, and appropriations from the Treasury. Fees must cover all administrative expenses and at least one-third of the value of the claims to be paid.

Disbursements can be made only to the extent authorized in appropriation acts.

Output Performance Measures

	1985 Actual	1986 Estimate	1987 Estimate
Number of claims received	4	2	...
Number of claims processed	2	2	...

Decrease for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Fishermen's Guaranty Fund	1 (2)	$3,000	... (...)	$1,800	-1 (-2)	-$1,200

A decrease of one position and $1,200,000 is proposed. NOAA is requesting an appropriation of $1,800,000 for FY 1987 and will propose legislation to transfer the program to the Department of State in FY 1987. It is expected that this would improve overall effectiveness in carrying out provisions of the Fishermen's Protective Act which is already administered by the Department of State.

Summary of Requirements by Object Class
(dollar amounts in thousands)

Appropriation: Fishermen's Guaranty Fund

Object class	1987 Base			1987 Estimate			Inc. (+) or Dec. (-)			Emp. 12/31
	Pos.	Workyears	Amount	Pos.	Workyears	Amount	Pos.	Workyears	Amount	
11 Total personnel compensation...............	1	2	$25	...	...	$25	-1	-2	...	1
Other objects:										
12 Personnel benefits..........................			3			3			...	
21 Travel and transportation of persons........			2			2			...	
24 Printing and reproduction..................			1			1			...	
25 Other services..............................			17			17			...	
26 Supplies and materials......................			2			2			...	
31 Equipment...................................			15			15			...	
42 Insurance claims and indemnities............			2,935			1,735			-$1,200	
Total requirements........................			3,000			1,800			-1,200	

Justification by Object Class
(dollar amounts in thousands)

Object class	1987 Base Pos.	1987 Base Workyears	1987 Base Amount	1987 Estimate Pos.	1987 Estimate Workyears	1987 Estimate Amount	Inc. (+) or Dec. (-) Pos.	Inc. (+) or Dec. (-) Workyears	Inc. (+) or Dec. (-) Amount
11.0 Total positions									
General schedule	1	2	$25	...	...	$25	-1	-2	
12.1 Personnel benefits:									
Civil Service retirement			2			2			
Health Insurance			1			1			
Total, personnel benefits			3			3			
21.0 Travel and transportation of persons									
Program travel			2			2			
24.0 Printing and reproduction			1			1			
25.0 Other services									
Other			17			17			...
26.0 Supplies and materials									
General office supplies			2			2			...
31.0 Equipment			15			15			...
42.0 Insurance claims and indemnities			2,935			1,735			-$1,200

Appropriation: Fishermen's Guaranty Fund

Personnel Summary

	1985 Actual	1986 Estimate	1987 Estimate
Total number of full-time permanent positions...	1	1	...
Total compensable workyears: Full-time equivalent employment...........................	1	2	...
Average GS grade..	9.75	9.75	...
Average GS salary...	$32,681	$32,681	...

Appropriation: Federal Ship Financing Fund, Fishing Vessels

Appropriation language and code citations:

1. During 1987, no commitments to guarantee loans will be made.

No specific authority

46 USC 1273 (f) provides that "The aggregate unpaid principal amount of the obligations guaranteed under this section and outstanding at any one time shall not exceed $12,000,000,000, of which $2,000,000,000 shall be limited to obligations pertaining to commercial ocean thermal energy conversion facilities or plantships... and of which $850,000,000 shall be limited to guarantees of obligations for fishing vessels and fishery facilities...".

The FY 1987 budget proposes to transfer portfolio management and any unexpended balances in the Fund to the Department's Office of Grant and Loan Administration.

Summary of Requirements
(dollar amounts in thousands)

Appropriation: Aviation Weather Services Program Trust Fund

Page No.	Summary of adjustments to base and built-in changes:	Perm. Pos.	Amount	Perm. Pos.	Amount
	Appropriation currently available, 1986			... (...)	$28,000
	1987 Base			... (...)	28,000

Page No.	Comparison by activities:	1985 Actual Perm. Pos.	1985 Actual Amount	1986 Currently Available Perm. Pos.	1986 Currently Available Amount	1987 Base Perm. Pos.	1987 Base Amount	1987 Estimate Perm. Pos.	1987 Estimate Amount	Inc.(+) or Dec.(-) Over 1987 Base Perm. Pos.	Inc.(+) or Dec.(-) Over 1987 Base Amount
	Aviation Weather Services Program Trust Fund:										
NOAA-175	Aviation weather services	... (...)	$27,000 (27,000)	... (...)	$28,000 (28,000)	... (...)	$28,000	... (...)	$30,000	... (...)	+$2,000
	Aviation warning and forecast systems	... (...)	... (...)	... (...)	... (...)	... (...)	...	... (...)	47,500	... (...)	+47,500
	Total requirements	... (...)	27,000 (27,000)	... (...)	28,000 (28,000)	... (...)	28,000	... (...)	77,500	... (...)	+49,500

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Justification of Program and Performance

Activity: Aviation Weather Services Program Trust Fund
Subactivity: Aviation weather services

(dollar amounts in thousands)

	1985 Actual		1986 Currently Available		1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Aviation weather services....................	... (...)	$27,000 (27,000)	... (...)	$28,000 (28,000)	... (...)	$28,000	... (...)	$30,000	... (...)	+$2,000
Aviation warning and forecast systems........	... (...)	... (...)	... (...)	... (...)	... (...)	...	... (...)	47,500	... (...)	+47,500
Total requirements...........................	... (...)	27,000 (27,000)	... (...)	28,000 (28,000)	... (...)	28,000	... (...)	77,500	... (...)	+49,500

Note: Permanent position amounts in parenthesis represent workyears and dollar amounts in parenthesis represent obligations.

Goals and Objectives

Goals: To furnish weather information for safe, efficient aircraft operations and management of the National Airspace System as recommended by the Department of Transportation's Federal Aviation Administration (FAA) under provisions of the Federal Aviation Act of 1958 and in accordance with International Civil Aviation Organization agreements.

Objectives: To provide required forecasts for airports and en route operations, and to develop and implement, in cooperation with FAA, alternative means of providing briefings to general aviation and alternatives for obtaining surface weather observations.

Base Program

The Airport and Airway Improvement Act of 1982 (49 U.S.C. 2205) authorized use of the Airport and Airway Trust Fund for financing the Aviation Weather Services program administered by the National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce. NOAA provides meteorological observations, forecasts, warnings, and advisories to the Federal Aviation Administration and other aviation interests in support of the National Airspace System. In 1984, the Congress appropriated $27,000,000 for this program from the Airport and Airway Trust Fund. In FY 1985, an Aviation Weather Services program trust fund was created to provide the proper mechanism of transferring approved appropriations from the Trust Fund to NOAA.

Increases for FY 1987

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm Pos.	Amount
Aviation weather services	... (...)	$28,000	... (...)	$30,000	... (...)	+$2,000

NOAA requests an additional $2,000,000 to fund increased requirements for providing aviation weather services. In FY 1987, the NWS will implement courses devoted to the training of aviation weather forecasters in response to FAA requirements for near-term improvements in the aviation weather forecasting system. In addition, the NWS will provide increased aviation weather services resulting from the rapid expansion of service by air carriers following deregulation of the airline industry.

The object class detail for this increase follows:

	Annual Amount
Total compensation	+$1,062,000
Personnel benefits	+143,000
Travel and transportation of persons	+287,000
Rent, communications, and utilities	+60,000
Printing and reproduction	+28,000
Other services	+240,000
Supplies and materials	+50,000
Equipment	+130,000
Total	+2,000,000

	1987 Base		1987 Estimate		Inc.(+) or Dec.(-)	
	Perm. Pos.	Amount	Perm. Pos.	Amount	Perm. Pos.	Amount
Aviation warning and forecast systems	... (...)	...	... (...)	$47,500	... (...)	+$47,500

In FY 1987, the Next Generation Weather Radar Program (NEXRAD) will be financed through the Airport and Airway Trust Fund at a level of $47,500,000.

In FY 1987, approximately $13,000,000 of NEXRAD program funds will be used to complete in-depth site surveys and to begin preparation of NOAA facilities for the production radars. Approximately $34,250,000 will be used to fund FY 1987 limited production contractual activity and the start of the production phase effort with the selected contractor. Specifically, planned activities include: limited radar production; initial operational test and evaluation (IOT&E) of limited production radars, produced by the selected contractor at the Operational Support Facility; training of operational and OSF personnel; release of long lead items for full production; award of the full-scale production contract; and the first phase of land acquisition for NEXRAD sites.

Approximately $250,000 will fund three start-up positions to perform engineering and meteorological duties at the Operational Support Facility. Funding requested by the three agencies (DOD, DOC, DOT) in the NEXRAD program will maintain the planned schedule of activities.

Additional funding will be required in future years as follows:

	(dollars in thousands)				
	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
Radar System Upgrade	$47,500	$58,500	$90,800	$81,100	$55,700

The object class detail for this increase follows:

	Annual Amount
Total compensation	+$1,061,622
Personnel benefits	+136,378
Travel and transportation of persons	+150,000
Rent, communications, and utilities	+28,000
Other services	+46,124,000
Total	+47,500,000

COMPARISON OF THE NOAA REQUEST TO THE PRESIDENT'S REQUEST

Mr. **Smith**. I have a little difficulty detecting just how enthusiastic you were as you read that statement.

Did you sit down in front of a tape recorder and just explode that stuff?

Mr. **Calio**. What I just said? I am very enthusiastic about it.

Mr. **Smith**. You are?

Mr. **Calio**. If I could let my ethnic background break through, I would have probably given it to you with a lot more gusto.

Mr. **Smith**. Then I assume from that that you asked OMB for an even bigger cut than you got. You usually have to compromise with OMB.

Mr. **Calio**. No. I compromised with OMB.

Mr. **Smith**. You did?

Mr. **Calio**. Yes, sir.

Mr. **Smith**. What did you ask them for originally?

Mr. **Calio**. $1.3 billion.

Mr. **Smith**. And you got $917 million?

Mr. **Calio**. Yes, sir.

Mr. **Smith**. If you are so enthusiastic about cutting, it doesn't sound like to me that that was a compromise.

Mr. **Calio**. Well, sir, we can always figure out ways of doing other things and additional programs.

Mr. **Smith**. That sounds like you weren't very enthusiastic about cutting. You stated that you were. Your statement indicates that you really wanted to cut back on these things; we don't need them; they are not appropriate. But $1.3 billion would finance pretty much what we had last year.

Mr. **Calio**. Pretty close to it. But I realize that we have to curb the Federal deficit, and that I have to contribute to that effort. I have negotiated with OMB what is a reasonable program, and it requires my management skills and those of my people to figure out how to provide the best services within that appropriation.

Mr. **Smith**. When we get right down to it, though, the fact of the matter is you don't think that these cuts are really necessarily in the national interest other than budgetary reasons, do you?

Mr. **Calio**. No, I can't say that. Some of them are, for other than budgetary reasons. I have some philosophical differences with some of the things that are in our budget, and which appear from year to year.

Mr. **Smith**. Would that be reflected in your original request to OMB?

Mr. **Calio**. No, it wouldn't be. The $1.3 billion, I don't think they were. No, they were not.

Mr. **Smith**. Let's have for the record what you originally asked OMB for, by categories, in greater detail. Expand on that a little bit more about which ones you put in there that you really didn't think were justified.

Mr. **Calio**. One versus two polar.

Mr. **Smith**. Pardon?

Mr. **Calio**. I am giving you the answer to that question. One versus two polar orbiting satellites. I think we can live with one, although I submitted two in my budget to the OMB, and the Coastal Zone Management program, and there are a few others. We can provide that list.

Mr. SMITH. Expand on that for the record.

Mr. CALIO. Yes.

[The information follows:]

Comparison of the FY 1986 Appropriation and the FY 1987 Request from NOAA to DOC - DOC to OMB and OMB to Congress

			FY 1987		
Subactivity	Line Item	FY 86 1/ Approp.	DOC 2/ Request	OMB 2/ Request	Congress. Request
Ocean Research	Ocean Climate Research	13,168	19,463	12,503	11,138
	Undersea Res. Prog.	9,635	6,485	6,485	-0-
	Oceans & Gl Prog. Res.	13,885	19,299	14,226	10,820
		36,688	45,247	33,214	21,958
Ocean Services	Ocean & GL Asses/Ser.	28,789	34,010	24,710	20,102
	Nat'l Marine Poll. Prog.	1,301	1,287	1,287	1,309
		30,090	35,297	25,997	21,411
Sea Grant	Marine Resource R&D	22,355	21,053	15,173	-0-
	Advisory Serv. Training/ Tech. Transfer	15,425	15,448	12,361	-0-
	Nat'l Projects	311	402	307	-0-
	Program Management	2,159	2,159	2,159	-0-
		40,250	39,062	30,000	-0-
CZM	Estuarine Sanctuaries	2,059	1,259	1,259	1,259
	Marine Sanctuaries	2,852	2,127	2,127	2,196
	States Assist. Programs	36,000	30,000	30,000	-0-
	Program Management	3,043	2,311	2,311	2,420
		43,954	35,697	35,697	5,875
M, C & Geodesy	Aero. Chart Serv.	8,828	8,707	8,143	7,613
	Naut. Chart Serv.	17,474	30,543	21,286	16,548
	Coastal Mapping Serv.	3,844	3,598	3,598	3,796
	Geodetic Ref. System	15,949	15,141	13,141	13,623
		46,095	57,989	46,168	41,580
Info. Col.& Anal	Resource Info.	68,115	67,313	55,824	42,807
	Fisheries Industry Info.	8,932	11,747	5,647	5,927
	Info. Analysis & Disem.	17,980	19,719	16,745	16,691
		95,027	98,779	78,216	65,425
Cons. & Mgmt Ops.	Fisheries Mgmt Prog.	26,686	17,192	15,442	13,834
	Protected Species Mgmt.	3,660	4,055	3,555	3,718
	Habitat Conservation	5,311	5,269	3,000	3,059
	Enforcement & Surveillance	7,567	9,416	7,116	7,689
		43,224	35,932	29,113	28,300

1/ Before Gramm-Rudman-Hollings reductions.
2/ Does not include adjustments to base.

			FY 1987		
Subactivity	Line Item	FY 86 Approp.	DOC Request	OMB Request	Congress. Request
State & Ind. Asst. Programs	Grants to States	10,500	8,000	-0-	-0-
	Fisheries Dev. Program	12,702	8,269	2,714	2,964
	Fin. Serv. Prog. Admin.	656	656	656	-0-
		23,858	16,925	3,370	2,964
Public Warning and Forecast Services	Observations	87,260	82,609	81,809	81,273
	Communications	9,122	8,987	8,987	9,020
	Maintenance & Repair	37,237	35,731	35,731	36,588
	Public Warning & Forecast Preparation	73,195	70,433	66,188	67,518
	Dissemination	34,820	33,012	33,012	33,805
	Nat'l Prediction Centers	30,237	29,512	29,548	30,281
	Public Warning & Forecast Systems	18,366	71,250	63,250	16,000
		290,237	331,534	318,525	274,485
Atmospheric & Hydrological Research	Meteorological Research	39,712	39,240	36,990	33,974
	Atmospheric Climate Res.	9,785	9,628	9,628	8,789
	Air Quality Research	10,739	14,961	12,111	11,783
	Solar Terrestrial Ser.& Res.	4,955	5,149	4,799	4,610
	Nat'l Climate Program	1,946	6,395	1,145	1,148
		67,137	75,373	64,673	60,304
Satellite Services	Environmental Sat. Ser.	47,414	78,655	61,208	49,002
	Landsat Operations	25,004	30,604	30,604	23,604
	Landsat Commercialization	-0-	90,000	97,000	-0-
		72,418	199,259	188,812	72,606
Satellite Systems	Polar Spacecraft & Launch.	87,100	119,094	119,094	24,874
	Polar Ground Systems	3,250	16,100	16,100	6,300
	Geostationary Spacecraft & Launching	143,983	125,700	121,530	118,530
	Geostationary Ground Systems	5,796	25,620	18,435	18,435
		240,129	286,514	275,159	168,139
Data & Infor. Services	Climatic Data Services	9,575	9,039	9,003	9,181
	Ocean Data Services	5,129	5,003	5,003	5,138
	Geophysical Data Services	3,514	3,434	3,434	3,526
	Assessment & Info. Ser.	4,901	5,761	4,761	4,889
	Nat'l Ocean & Atmos. Data Network		3,575	2,130	-0-
		23,119	26,812	24,331	22,734

Subactivity	Line Item	FY 86 Approp.	FY 1987		
			DOC Request	OMB Request	Congress. Request
Exec. Direction & Administration	Executive Direction	22,068	28,231	21,180	22,081
	Central Admin. Support	24,929	23,561	23,561	24,904
	Facilities	-0-	10,000	1,000	1,000
	Retired Pay (Comm. Oficers)	4,632	4,632	4,632	5,019
	NACOA	500	630	-0-	-0-
		52,129	67,054	50,373	53,004
Marine Services	Ship Operations	36,450	28,813	35,491	26,104
	Ship Maint. & Support Ser.	22,264	37,135	24,532	21,407
		58,714	65,948	60,023	47,511
Aircraft Services	Aircraft Ops. & Maint.	15,805	17,114	15,705	14,694
Non-Living Marine Resources	Ocean Minerals	1,525	1,510	1,510	1,589

GRAMM-RUDMAN EFFECTS

Mr. SMITH. The sequestration, $51,919,000, will that cause you to have furloughs?

Mr. CALIO. If we do it straight across the board the way the procedure was established, the 4.3 percent would cause us some furloughs. We are considering reprogramming actions on the order of about $9 million in order to avoid that.

There are three categories of problems we had that caused a reprogramming: one, for money already spent; two, where there were one-time costs peculiar to the 1986 budget; and three, where we could avoid furloughs, like in the weather observations and weather stations. That was about $9 million, and we have a reprogramming request coming through the Department right now.

Mr. SMITH. So with that reprogramming, you won't need to have any furloughs?

Mr. CALIO. That is correct, sir.

COASTAL ZONE MANAGEMENT AND SEA GRANT RESCISSIONS

Mr. SMITH. The rescissions totaled $63,323,000. If we don't act by April 15, they won't occur. You are not assuming we are going to act by April 15, are you?

Mr. CALIO. I would hope so.

Mr. SMITH. Are you going ahead and planning so you will be ready to implement the appropriation?

Mr. CALIO. Yes, sir.

Mr. SMITH. How quickly can you obligate the funds for these activities?

Mr. CALIO. We will probably do them in a time frame in which the funds are needed. If you noticed, I think it was in the Sea Grant arena, we held back $8.3 million. The reason for that was that we had already funded some of the institutions. And there are two others that we had to take care of between the time the budget was being prepared and April 15, and we will be doing that in that time frame. Then we will move the other grants on a schedule which is consistent with their expiration dates.

So we are moving in a timely and a meaningful fashion. The same would be true in the coastal zone management area.

Mr. SMITH. Other than that, pretty much the rescissions won't have much effect?

Mr. CALIO. On a time-dependent basis, no. Those are the two programs where they are time-sensitive.

Mr. SMITH. Mr. Dwyer.

Mr. DWYER. Mr. Chairman, I would like to defer to Mr. Carr. He is on a tight schedule.

NEXRAD/FAA FUNDING

Mr. CARR. I thank you for yielding to me.

Tell me about NEXRAD. How much have you got in the budget this year for NEXRAD?

Mr. CALIO. For 1986?

Mr. CARR. Yes.

Mr. CALIO. 1986 or 1987?

In 1986, you are talking about $12.8 million.

Mr. CARR. And 1987?

Mr. CALIO. The request is $47.5 million.

Mr. CARR. $47.5 million in 1987?

Mr. CALIO. Yes, sir.

Mr. CARR. And twelve point what?

Mr. CALIO. Well, with the Gramm-Rudman reduction, it is $12.3 million.

Mr. CARR. $12.3 million.

Would you briefly state for the record what NEXRAD is?

Mr. CALIO. It is a doppler radar system that will be used to provide wind speeds, wind directions at various altitudes, and precipitation amounts.

Mr. CARR. In the first page of your prepared statement, you say that the total budget request, et cetera, "which includes the transfer of $77.5 million from the Airport and Airway Trust Fund to fund aviation weather and NEXRAD programs."

Mr. CALIO. Yes, sir.

Mr. CARR. How much from the Airport and Airway Trust Fund is going to be used under your proposal for NEXRAD?

Mr. CALIO. The $47.5 million.

The other $30 million is aviation weather.

Mr. CARR. Why are you taking this out of the trust fund?

Mr. CALIO. Because the aviation community is one of the primary users of this kind of data.

Mr. CARR. It is one of the primary users of this kind of data collection, but now you have got the whole thing coming out of the trust fund.

Mr. CALIO. That is correct.

Mr. CARR. Why should they pay the whole bill? If they are only one of the users, why are you tapping the trust fund for the whole bill?

Mr. CALIO. The general public has the rest of it. These are funds that are readily available.

Mr. CARR. Don't you think you ought to apportion what you claim in the trust fund versus what you claim from the general fund?

Mr. CALIO. That would be another way to do it.

Mr. CARR. It is the only way to do it, because according to the authorization—you don't have authorization to take the entire amount. Under U.S. Code 49-2205—and you can read as well as I do—you can only charge the trust fund for aviation services. And your testimony states here today that NEXRAD is far more than aviation services. It may be a user, but it isn't the whole user. So you don't have the authority to take that amount of money out of the trust fund for this activity.

AIRPORT AND AIRWAY IMPROVEMENT ACT

Mr. CALIO. Mr. Carr, I have before me that the Airport and Airway Improvement Act of 1982, 49 U.S.C. 2205, authorizes the use of the Airport and Airway Trust Fund for the aviation weather service program, and the next generation radar administered by NOAA, Section A, 1982, sir.

Mr. **Carr**. I am looking at Section A right here, and I don't see anything in here about NEXRAD. And I am reading it right out of the Code. It says—Section D, Weather Services, "The Secretary is authorized to reimburse"—reimburse—"NOAA from the funds authorized in Section C"—which is the trust fund—"of this section for fiscal years beginning in..." et cetera, et cetera, "...for the cost of providing the Federal Aviation Administration with weather reporting services."

There is nothing in there about NEXRAD, and nothing in there that says that the Aviation Trust Fund should be tapped to subsidize general weather reporting services. It is very clear, and I dare say you look back into the debate and what the Aviation Trust Fund is all about—I mean, they would be horrified.

Now, everyone knows that we have got a Gramm-Rudman budget deficit problem. But, by golly, people who are interested in aviation, as I am, are going to fight tooth and nail to prevent everybody under the sun trying to figure out an aviation angle where they can solve their budget deficit problem by jumping into the Aviation Trust Fund.

Mr. **Calio**. This isn't a Gramm-Rudman budget deficit.

Mr. **Carr**. It is a budget deficit problem. That is your testimony: We have got a budget deficit problem. We have got to come up with these cuts. We have got to maintain services.

Mr. **Calio**. And the trust fund is a source of funds.

Mr. **Carr**. I don't blame you. If I worked at your agency, I would say here is this trust fund that has got this enormous balance in it. Let's go see what we can finance for our mission out of their money. But I am sorry; I don't think you have the authority to ask this committee for $47.5 million, based on your testimony.

Although it may be a primary user, it isn't the only user. You have apportioned no money out of the general fund for this.

Mr. **Calio**. But you are also questioning the legality of whether we can do this or not.

Can I pursue that later and do further analysis with our legal staff and get back to you?

Mr. **Carr**. I would be glad to have you do that. But I don't think we have to do legal analyses.

Mr. **Calio**. Our attorneys tell us that we have the ability to do that.

Mr. **Carr**. Is your attorney in the room?

Mr. **Calio**. No, he is not, sir. And I apologize for that.

AVIATION WEATHER SERVICES

Mr. **Carr**. The fact of the matter is the language is the language. You can get reimbursement for aviation weather services, something which I frankly oppose. But that is the law. But you can't get any more than that. And your testimony here today is that NEXRAD is not an aviation alone system.

Mr. **Calio**. It is not.

May I ask Mr. Brown to comment, from the department?

Mr. **Brown**. Mark Brown, Budget Office.

We had the Department's General Counsel and NOAA's counsel look at the FAA Trust Fund authority, and the services for the aviation weather services were covered under Section D. And I was advised by counsel that the Section A would provide, with the certification of the Administrator of the FAA, for the procurement of NEXRAD, weather safety equipment, and that we could fund this through that mechanism.

Mr. CARR. Mr. Chairman, this is very, very disturbing. I will say for the record NEXRAD does not appear in Section A; indeed, does not appear. The acronym "NEXRAD" does not appear in this statute. And it is fairly easy to determine that. And I think that you had better come up with a very specific—a very specific—counsel's opinion as to how they get NEXRAD, which includes more than aviation weather, into the Aviation Trust Fund.

That is not authorized. And, Mr. Chairman, I would hope that the committee would even go further than that and roll back some of this invasion of the trust fund, even to the extent it is authorized.

In 1985, $27 million was transferred. In 1986, I see it is about $28 million. Now they are pushing that up to $30 million.

But then the big increase is $47.5 million. It is more than doubling what they are grabbing out of the trust fund today, and they are trying to say it is all aviation-related. That is very, very disturbing.

And I am a supporter of NOAA. You know that.

Mr. CALIO. Yes, sir.

Mr. CARR. But I am a supporter of the Aviation Trust Fund. And I want to keep the trust fund solvent.

ELIMINATION OF SEA GRANT

Let me ask you, have you zeroed out the Sea Grant program again.

Mr. CALIO. Yes, sir.

Mr. CARR. Was that your idea or OMB's?

Mr. CALIO. Mutual consent.

Mr. CARR. Mutual what?

Mr. CALIO. Consent.

Mr. CARR. Consent?

Mr. CALIO. We agreed.

Mr. CARR. Did you ask them for it initially?

Mr. CALIO. Yes, I did.

Mr. CARR. Last year, this subcommittee restored, in addition to the sea grant program, funding for agriculture, weather and the fruit frost programs. We have done so every year. And they have been cut again.

Are we playing a little game here? Did you ask for that to OMB?

Mr. CALIO. Yes, I did.

Mr. CARR. So the game is that OMB zeroes it out knowing we will put it back, and then the monkey is on our back for spending; is that the idea?

Mr. CALIO. No.

I would like to come back, if I could, to the Sea Grant program. Can I talk about that?

Mr. CARR. Great.

Mr. **Calio**. Because there are a couple of these issues that come back and forth.

I think you have heard testimony from my associates in the Sea Grant community. I commend them. They are a talented group to work with. But I think we have got to look at this whole notion of how much is enough as far as what we are spending.

SEA GRANT UNIVERSITIES

They submitted a report to you, and I would like to take another position relative to Sea Grant. If I understand what the initial legislation was to do, it was to establish a network of Sea Grant universities to be able to do research, provide advisory services and to train people. This was done 20 years ago when the United States was lagging in these skills, and over that time those institutions were established.

We have some 21 colleges and 8 institutions in place around the coastal regions of the United States. Now with a serious budget situation and when the Federal Government is putting close to $500 million in ocean research and services, the Sea Grant program should be reevaluated, in terms of its original purposes. Why can't those Sea Grant institutions compete for the increased funding that the National Science Foundation has requested in fiscal year 1987?

According to an analysis of the 1987 ocean sciences budget prepared by the American Association for the Advancement of Science, there is a 15 percent increase in ocean research across the Federal Government. Sea Grant institutions should be uniquely qualified now to compete for those dollars. Why should we take a segmented portion of the NOAA budget and earmark it for 28 institutions? As far as the advisory services are concerned, why can't the beneficiaries pay for that?

From the standpoint of the small amount of the Sea Grant program that goes for education, granted, we probably should have a national responsibility for doing that, and that is a reasonable thing to go forward but that is roughly $3 million—not $39 million—going specifically to 21 universities and institutions around the coastal regions, paid out of the general tax base. People in the center of the country don't have that advantage.

We have accomplished what we have tried to do in that particular arena. Why not open it up and let science work on a competitive basis?

Mr. **Carr**. A valiant effort. I don't buy it. I hope the committee will turn it down.

I just want to point out that the Sea Grant program was based, to some extent, on the example of the land grant system. where all kinds of research and extension are conducted, and the Administration isn't proposing the end of the land grant program.

Because the job is done and because these things are local in nature and can be turned on, boy, I guess it just proves that there are more farmers than there are people who earn their living at sea.

Mr. **Calio**. But, Mr. Carr, $500 million worth of requests are coming forward in ocean sciences and services, by the Administration. That is a lot of money.

Mr. **Carr**. Well, it is.

Mr. **Calio**. And those Sea Grant universities have a chance——

Mr. **Carr**. It is.

Mr. **Calio** [continuing]. A darned good chance of competing for those dollars.

Mr. **Carr**. And there is a lot of money going out in agriculture research, too.

Mr. **Calio**. I am sure there is.

Mr. **Carr**. What we have here is mirror opposites, one for the land and one for the sea, basically. That was the premise of this whole exercise. And it seems to me that if the Administration is consistent, it is going to come out there and say let's get rid of the land grant program, too. Let's get rid of all these agriculture extension agents and everything else.

Mr. **Smith**. They have said that for several years.

AGRICULTURE WEATHER

Mr. **Carr**. Well, anyway, in the 1985 farm bill there is language that states that agriculture and silvaculture weather service at the Federal level should have been maintained with joint planning between NOAA and the Department of Agriculture.

Is such planning underway?

Mr. **Calio**. Let me ask the head of the National Weather Service, Dr. Hallgren, Assistant Administrator for Weather Services.

Mr. **Hallgren**. We have always had a very close relationship with the Department of Agriculture on how to best put the agriculture weather service together, and we are continuing that at this point in time. And because the program is existing in 1986, our intent is to try to get to the point where the agriculture weather service could be picked up through the private meteorological sector that has developed rather substantially over the last five to seven years. And that is the path that we are trying to go.

Mr. **Carr**. I appreciate the answer, but I am really not sure that we hit the nail on the head here.

The farm bill, the one that we just passed, and the President just signed, has language which states that weather services at the Federal level should be maintained with joint planning.

Are you engaged in joint planning? I know you have got a great relationship. Do you have joint planning on this point going on today?

Mr. **Hallgren**. You mean that has been fostered since that has been passed?

Mr. **Carr**. Yes.

Mr. **Hallgren**. No, we have not started that at this time. The joint relationship was always one to try and identify the best way of providing the services. I don't know if you would call that planning.

Mr. **Carr**. Good relations is one thing. Actually sitting down and having joint planning meetings is what I am talking about.

You haven't had any?

Mr. **Hallgren**. No, we have not.

Mr. **Carr**. Are any planned?

Mr. **Hallgren**. No, sir. I have always felt we jointly worked out or planned how we go about providing the agricultural weather. I did not view that as a new dimension, I must admit.

Mr. **Calio**. Do you do planning with Agriculture?

Mr. **Hallgren**. Yes, we do.

Mr. **Calio**. There is planning activity going on?

Mr. **Hallgren**. We have always had work going on through the Federal coordination mechanism——

Mr. **Carr**. I am not talking about coordination good relations. I am talking about planning under the 1985 farm bill, as the 1985 farm bill has asked you and Agriculture to do.

Mr. **Hallgren**. I have not instituted something new because of that specific language.

Mr. **Carr**. Are you planning on doing that?

Mr. **Hallgren**. Yes. We always conform to what is asked.

GREAT LAKES ENVIRONMENTAL LABORATORY

Mr. **Carr**. I am pleased to see that we won one. You came in with the Great Lakes Lab. I am glad for that. I have been beating up on you. I don't want to do that.

The funding level is only $3 million, and last year it was $3.844 million. I know that there are some consolidations going on where the Great Lakes lab may be asked to do some more things.

Can you talk to me just briefly about how they do more with less, and apparently are being asked to do more?

Mr. **Calio**. I haven't sat down with that group. I plan to do that.

Mr. **Carr**. Will you supply an answer for the record?

Mr. **Calio**. Yes.

[The information follows:]

Funding Reductions at the Great Lakes Environmental Research Laboratory

Savings of $884,000 can be achieved at the Great Lakes Environmental Research Laboratory (GLERL) by reducing hazards and related research, particularly research on ice hazards, surface waves and water level fluctuations. This research provides services to the states surrounding the Great Lakes; those states and the private sector interests which benefit from these studies should assume a greater share of funding responsibility.

GREAT LAKES OFFICE

Mr. **Carr**. Last year, we got ourselves into a little problem here. There was a $1.1 million item that came dropping in out of the sky for a Great Lakes office, presumably in Wisconsin, to do some kind of coordination or something. I don't think we had anything on the record in last year's hearing about that.

Do you know anything about that?

Mr. **Calio**. $1.1 million?

Mr. **Carr**. This came to us from the Senate side. It was suddenly popped up, a $1.1 million——

Mr. **Calio**. That never got approved.

Mr. **Carr**. You are right; it didn't get approved here because there was no record for it and it was not authorized at the time. Is it authorized now?

Mr. CALIO. No.

Mr. CARR. Is that in any of your planning?

Mr. CALIO. No, sir.

Mr. CARR. You are not making a case for that right now?

Mr. CALIO. No, sir.

Mr. CARR. What would that office have done? Are there studies that tell us what it does or what they wanted to do with that money?

Mr. CALIO. Well, one of the notions that I remember talking about at that point in time was to do a Great Lakes atlas, an assessment of conditions associated with the Great Lakes, the physical oceanography, marine biology assessments and the like, and bring that together in the form of an atlas. That was one notion.

Mr. CARR. The State of Wisconsin was talked about in this?

Mr. CALIO. Yes, sir.

Mr. CARR. As an office?

Mr. CALIO. Yes, sir.

Mr. CARR. Why would you open up a new office in Wisconsin when you have the Great Lakes lab in Ann Arbor?

Mr. CALIO. That is a good question. We don't have that right now.

Mr. CARR. So there is no plan. You are not making any request. We don't need to approve an office in Wisconsin.

Mr. CALIO. We are not making any requests. Let me stop right there. Take that up with the Senate.

Mr. CARR. Mr. Dwyer has been kind enough to yield to me, and I have about four more questions. I will submit them for the record, Mr. Chairman.

I do want to thank my colleague for yielding to me, and I do want to thank you for the courtesies extended to me, to let me know a little bit more about the wonderful work you do, both in Alaska and down in Florida. The hurricane hunter trip that I took was particularly revealing.

You do a lot of great work. I just don't think you ought to get the Aviation Trust Fund to pay for it.

Mr. CALIO. Yes, sir.

Mr. CARR. Thank you, Mr. Chairman.

[The questions of Mr. Carr follow:]

Question for the Record by
Congressman Carr

QUESTION:

In the FY 87 NOAA budget summary, the rationalization for terminating the Coastal Zone Management program and rescinding $36 million in FY 86 CZM Act grants to states is that all states desiring to participate in the CZM program are now doing so, and that responsibility for the program should be turned over to its "beneficiaries".

Gov. Celeste of Ohio has recently taken steps to introduce legislation in the Ohio General Assembly/Senate to establish a state coastal program. Is this not evidence that the National CZM program is still dynamic and that the remaining 10% of the country's coast should in time become part of the national program? If so, what allowances would you make to provide funding for new federally-approved state coastal management programs?

ANSWER:

We agree that states which do not currently have federally-approved coastal programs are still quite dynamic as indicated by the efforts of the State of Ohio. Ohio's efforts are being made without the use of Federal funds, and apparently the state government recognizes the value to the State to control its own resources. We believe that states are the prime beneficiaries of coastal management and as such should support their own programs.

QUESTION:

Do you really believe that "beneficiaries" of the CZM program are only the states? For example, do you support the contention that the only people who benefit from the federally approved Michigan coastal program are the residents of Michigan?

ANSWER:

When referring to the state as being the beneficiaries of coastal management, we did not mean to imply that the residents of a particular state are the only beneficiaries of coastal management but that they are the prime beneficiaries of their state's coastal management.

QUESTION:

It has come to my attention that EPA's FY 87 coastal and ocean programs, including Chesapeake Bay ($10 million), Great Lakes monitoring ($5.7 million), Estuarine Management ($4 million), and ocean incineration ($100 increase over FY 86 levels), fared well under the President's budget request. Yet NOAA's ocean and coastal programs are targeted for a 53% reduction ($198.6 million in FY 86 to $92.4 million in President's FY 87 request).

If NOAA is the coastal/ocean resource agency of the federal government how do you explain these reductions?

ANSWER:

Budget reductions regarding ocean and coastal programs, as with all programs, are made on the basis of each program's merit and not on which agency manages the programs.

QUESTION:

What would be the budgetary impacts on state coastal management programs if the FY 86 rescission is approved or the FY 87 budget recommendations to terminate CZM grants assistance is upheld?

ANSWER:

Coastal states would have to provide the additional state funds to continue their operations. Most states budgets are either balanced or have a surplus, and these states should be able to continue their coastal management programs.

QUESTION:

It appears likely that Congress will approve legislation to reauthorize the CZM Act for an additional 5 years. If so, and the legislation is enacted, can we expect the Administration, as it has over the last 6 years, to continually oppose funding of grants to states for the Administration of their federally approved coastal management program?

ANSWER:

The reauthorization of state's assistance under the Coastal Zone Management Act does not change our belief that states are in a better position to assume financial responsibility for their programs than the Federal government. Therefore, there is no reason to change the administration's position on this issue.

Mr. SMITH. Mr. Dwyer.

OCEAN DUMPING

Mr. DWYER. Thank you, Mr. Chairman.

Much has been said about the increased ocean waste problem. What do you have in this budget to solve that?

Mr. CALIO. About $6.2 million.

Mr. DWYER. Would you expand on that, how do you intend to put these funds to work?

Mr. CALIO. What makes up the $6.2 million?

Mr. DWYER. Yes.

What are your programs, and do you think you will be able to be helpful in that particular area?

Mr. CALIO. This is John Carey, Budget and Finance Officer for NOAA.

Mr. CAREY. Primarily, those funds are put into the status and trends activities which support baseline assessment and monitoring of the environment, which can then be used to assess changes as they occur over time.

There is also work on production of atlases that document that information, so that it can be used by other decision-makers.

ACID RAIN

Mr. DWYER. Today's paper announced an agreement that was signed between the U.S. and Canada concerning acid rain, a commitment apparently of $5 billion—a U.S. commitment of $5 billion for demonstration programs and technologies to combat acid rain.

Will you people be part of that?

Mr. CALIO. We are a part of the National Acid Precipitation Assessment program, with four other departments. I co-chair with EPA, Energy, and Agriculture that research activity, which is roughly about $80 million a year right now.

I don't know what would have been agreed upon between the two countries yet, and could not answer whether we would be a part of it.

My inclination is that we would, because we are participants in the Acid Precipitation program.

Mr. DWYER. But you had no input into the program? It has been going on for some time.

Mr. CALIO. Not me directly. I have a Director of Research who operates the Acid Precipitation program, who works very closely with the Administrator of EPA, who is the primary focal point in this activity, and we work through him.

Mr. DWYER. You don't have a chief scientist in your agency, do you?

Mr. CALIO. We have a Director of Research in the Acid Precipitation program.

You mean in NOAA?

Mr. DWYER. In NOAA, in your administrative structure, you don't have the Office of the Chief Scientist?

Mr. CALIO. Not now. We have an Assistant Administrator for Oceanic and Atmospheric Research, but not a Chief Scientist per se.

Mr. **Dwyer**. Have you had any discussions on this topic at all?

Mr. **Calio**. Where?

Mr. **Dwyer**. I would presume in your office.

Mr. **Calio**. With whom? Outside?

Mr. **Dwyer**. No. When you are making up the administrative structure of your office, have you ever thought about having a chief scientist?

Mr. **Calio**. Yes, we have.

Mr. **Dwyer**. Would you report for the record what you might have discussed in that area?

Mr. **Calio**. Well, I have discussed it with members of the department, as to whether we could have such a position or not, and they have submitted that recommendation to the Office of Management and Budget.

Mr. **Dwyer**. Asking for a chief scientist?

Mr. **Calio**. Yes, sir.

Mr. **Dwyer**. And have they acted on that request?

Mr. **Calio**. Not yet.

Mr. **Dwyer**. When do you expect that they will act on it?

Mr. **Calio**. Shortly.

Mr. **Dwyer**. Do you think they will act on it favorably?

Mr. **Calio**. I think so.

DEFICIT REDUCTION

Mr. **Dwyer**. You seem very much—and this is to be admired—very much interested in coming up with a solution to the deficit. Might you suggest to the committee how this budget can be cut?

Mr. **Calio**. I have submitted that as the President's budget request.

Mr. **Dwyer**. If we have to go beyond that?

Mr. **Calio**. If we have to go further?

Mr. **Dwyer**. Yes.

Mr. **Calio**. I would like to work on that and submit that for the committee. I couldn't give you any additional areas right now. I can submit that to the committee.

Mr. **Dwyer**. Would you, please?

Mr. **Calio**. Yes, I will.

Mr. **Dwyer**. Thank you.

[The information follows:]

Further Reduction to the FY 1987 Budget Request

I have carefully gone over our FY 1987 request, especially focusing on the FY 1986 Gramm-Rudman impact. In my view, the amount included for NOAA in the President's FY 1987 budget request reflects the elimination or reduction of those programs that are beyond our core missions, and adequately funds high priority core activities. Further reductions are not feasible, without detrimental effects on our mission.

Mr. **Dwyer**. Thank you, Mr. Chairman.

AUTHORIZING LEGISLATION

Mr. **Smith**. You have a lot of authorization, I guess. How many different bills do you have authorizations in?

Mr. **Calio**. Eight or nine.

Mr. SMITH. Eight?

Mr. CALIO. Yes, sir.

Mr. SMITH. What is the status of these various items?

Mr. CALIO. I am advised, Mr. Chairman, all but $105 million has been authorized.

Mr. SMITH. What is the $105 million?

Mr. CALIO. Predominantly $50 million of it is in the Magnuson Fishery, the Conservation Management Act; the Marine Fisheries Program Authorization Act, $37 million; and the rest of it are one and two, deep seabed hard minerals, ocean pollution, ocean dumping, national climate, endangered species.

Mr. SMITH. What is the timetable on those authorizations? Do you have that?

Mr. CALIO. The MFCMA—I can submit this for the record.

Mr. SMITH. Do you think it will be in the next two, three or four weeks?

Mr. CALIO. No. The Magnuson Act expired on September 30, 1985. Coastal Zone Management expired September 30, 1985. Estuarine programs, the same thing. Endangered species, the same thing. The climate program, 1981; ocean dumping, 1982.

The only one coming up in 1986 is the Deep Seabed Hard Minerals Resources Act.

Mr. SMITH. Those that expired in 1985, have they had hearings on those?

Mr. CALIO. Yes. On the Magnuson Act, Marine Fisheries Program, Coastal Zone Management, yes.

Mr. SMITH. Have they been reported out of the Committee?

Mr. CALIO. That is correct, sir. It looks like about three or four have been reported out.

Mr. SMITH. So there is the possibility that they have?

Mr. CALIO. Yes, sir.

Mr. SMITH. Are any in the reconciliation bill?

Mr. CALIO. Yes, there are.

Mr. SMITH. Are those out of the $105 million?

Mr. CALIO. Yes. It looks like about 50 percent, Mr. Chairman.

Mr. SMITH. Submit a detailed list for the record.

Mr. CALIO. Yes, sir.

[The information follows:]

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

2/18/86

Authorizing Legislation by
Activity, Subactivity, and Line Item
(Dollars in Thousands)

	Expiration Date	FY 1986 Estimate	FY 1987 Estimate
Ocean and Coastal Programs			
1. Non-living Marine Resources			
a. Ocean Minerals			
P.L. 96-283, Deep Seabed Hard Minerals Resources Act	9/30/86	$1,525	$1,589
b. Ocean Energy			
P.L. 96-320, Ocean Thermal Energy Conversion Act of 1980	9/30/87	...	...
c. Ocean Minerals Resource Evaluation			
P.L. 80-373m Coast and Geodetic Survey Activities Act	N/A	...	...
Subtotal		1,525	1,589
2. Ocean Research			
a. Ocean Climate Research			
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	6,584*	5,569*
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	6,584*	5,569*
b. Undersea Research Program			
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	9,635	...
c. Ocean and Great Lakes Assessment and Research			
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	...	...
P.L. 95-273, National Ocean Pollution Planning Act	9/30/82	...	...
d. Ocean and Great Lakes Services Research			
Act of Oct 1, 1890, National Weather Service Organic Act	N/A	...	...
e. Ocean and Great Lakes Prediction and Research			
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	7,550	5,557
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	4,065	2,993
P.L. 95-273, National Ocean Pollution Planning Act	9/30/82	2,270	2,270
Subtotal		36,688	21,958
3. Ocean Services			
a. Ocean and Great Lakes Assessments and Services			
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	23,954	15,267
P.L. 92-532, Marine Protection Research & Sanctuaries Act of 1972 (Titie II)	9/30/82	4,835	4,835
b. National Marine Pollution Program			
P.L. 95-273, National Ocean Pollution Planning Act	9/30/82	1,301	1,309
Subtotal		30,090	21,411

	Expiration Date	FY 1986 Estimate	FY 1987 Estimate
4. Sea Grant			
a. Marine Resource Research and Development		$22,355	...
b. Advisory Services, Training and Technology Transfer		15,425	...
P.L. 89-454, National Sea Grant College Program Act		17,660	...
c National Projects			
P.L. 94-461, National Sea Grant College Program Act	9/30/83	311	...
d. Program Management			
P.L. 89-454, National Sea Grant College Program Act	9/30/87	2,159	...
Subtotal		40,250	
5. Coastal Zone Management			
a. Estuarine Sanctuaries			
P.L. 92-583, Coastal Zone Management Act of 1972	9/30/85	2,059	$1,259
b. Marine Sanctuaries			
P.L. 92-532, Marine Protection, Research and Sanctuaries Act of 1972 (Title III)	9/30/88	2,852	2,196
c. States Assistance Programs			
P.L. 92-583, Coastal Zone Management Act of 1972	10/1/86	36,000	...
d. Program Management			
P.L. 92-583, Coastal Zone Management Act of 1972	9/30/85	3,043	2,420
Subtotal		43,954	5,875
6. Mapping, Charting, and Geodesy Programs			
a. Aeronautical Chart Services		8,828	7,613
b. Nautical Chart Services		17,474	16,548
c. Coastal Mapping Services		3,844	3,796
d. Geodetic Reference System		15,949	13,623
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	46,095	41,580
Marine Fishery Resource Programs			
1. Information Collection and Analyses			
a. Resource Information			
P.L. 98-210, NOAA Marine Fisheries Program Authorizations Act	9/30/85	29,534	20,005
P.L. 94-265, Magnuson Fishery Conservation and Management Act of 1976	9/30/85	29,121	18,267
P.L. 92-522, Marine Mammal Protection Act of 1972	9/30/88	4,047	2,197
P.L. 93-205, Endangered Species Act of 1973	9/30/85	2,963	2,338
b. Fishery Industry Information			
P.L. 98-210, NOAA Marine Fisheries Program Authorizations Act	9/30/85	1,220	1,196
P.L. 94-265, Magnuson Fishery Conservation & Management Act of 1976	9/30/85	7,712	4,731
c. Information Analyses and Dissemination			
P.L. 98-210, NOAA Marine Fisheries Program Authorizations Act	9/30/85	7,041	5,917
P.L. 94-265, Magnuson Fishery Conservation and Management Act of 1976	9/30/85	9,863	9,698
P.L. 92-522, Marine Mammal Protection Act of 1972	9/30/88	897	897
P.L. 93-205, Endangered Species Act of 1973	9/30/85	179	179
Subtotal		92,577	65,425

	Expiration Date	FY 1986 Estimate	FY 1987 Estimate
2. Conservation and Management Operations			
a. Fisheries Management Programs			
P.L. 98-210, NOAA Marine Fisheries Program Authorization Act	9/30/85	$14,890	$3,838
P.L. 94-265, Magnuson Fishery Conservation and Management Act of 1976	9/30/85	13,496	9,996
b. Protected Species Management			
P.L. 98-210, NOAA Marine Fisheries Program Authorization Act	9/30/85	2,213	2,271
P.L. 93-205, Endangered Species Act of 1973	9/30/85	23	23
P.L. 95-522, Marine Mammal Protection Act of 1972	9/30/88	1,424	1,424
c. Habitat Conservation			
P.L. 98-210, NOAA Marine Fisheries Program Authorization Act	9/30/85	4,222	2,765
P.L. 94-265, Magnuson Fishery Conservation and Management Act of 1976	9/30/85	1,089	294
d. Enforcement and Surveillance			
P.L. 98-210, NOAA Marine Fisheries Program Authorization Act	9/30/85	1,524	1,646
P.L. 94-265, Magnuson Fishery Conservation and Management Act of 1976	9/30/85	4,552	4,552
P.L. 93-205, Endangered Species Act of 1973	9/30/85	235	235
P.L. 92-522, Marine Mammal Protection Act of 1972	9/30/88	1,256	1,256
Subtotal		44,924	28,300
3. State and Industry Assistance Programs			
a. Grants to States			
P.L. 88-309, Commercial Fisheries Research and Development Act of 1964	9/30/85	7,250	...
P.L. 89-304, Anadromous Fisheries Conservation Act	9/30/85	3,250	...
b. Fisheries Development Programs			
P.L. 98-210, NOAA Marine Fisheries Program Authorization Act	9/30/85	9,980	292
P.L. 94-265, Magnuson Fishery Conservation and Management Act of 1976	9/30/85	2,722	2,672
c. Financial Services Program Administration			
P.L. 98-210, NOAA Marine Fisheries Program Authorization Act	9/30/85	656	...
Subtotal		23,858	2,964
Atmospheric Programs			
1. Public Warning and Forecast Services			
a. Observations		87,260	81,273
b. Communications		9,122	9,020
c. Maintenance and Repair		37,237	36,588
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	133,619	126,881
d. Public Warning and Forecast Preparation			
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	36,598*	33,759*
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	36,597*	33,759*
e. Dissemination		34,820	33,805
f. National Prediction Centers		30,237	30,281
g. Public Warning and Forecast Systems		18,366	16,000
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	83,423	80,086
Subtotal		290,237	274,485

GRAMM-RUDMAN-HOLLINGS SEQUESTRATION

Mr. **Smith.** Operations research and facilities; how are you going to handle that sequestration?

Mr. **Calio.** Let me get the numbers. We took 4.3 percent from everything. And then we will be asking for a $9.3 million reprogramming with the three criteria that I talked about.

Mr. **Smith.** How does that take care of it?

Mr. **Calio.** For 1986? How does that take care of us for 1986?

Mr. **Smith.** That shifts some more then to personnel, does it?

Mr. **Calio.** That takes care of some personnel work. And the Tropical Oceans and Global Atmosphere Program in the Pacific, fisheries enforcement, public warning forecast services—that is the largest piece; that is about $6.5 million, to avoid lay-offs of some Weather Service people—meteorological research and climate data are the five areas.

Mr. **Smith.** That means you don't have to RIF?

Mr. **Calio.** Or furlough.

Mr. **Smith.** Or furlough?

Mr. **Calio.** Yes, sir.

Mr. **Smith.** That is for the balance of this fiscal year.

But from what you describe there, you are not eliminating that expense permanently. That will just build up the need for expense next year, won't it?

Mr. **Calio.** Covering the Weather Service and the other activities—they are covered in our budget. We are covered in our budget for those activities in 1987, at our budget request level.

Now there will be a reduction in—I don't want to use the word "RIF," but if that budget as requested is approved, there will be a reduction in the workforce, and some of that will have to take place through RIF action.

REPROGRAMMING

Mr. **Smith.** The point is that you asked for restoration in 1987 of what you were reprogramming, so that means that really you are borrowing from those activities.

Mr. **Calio.** No, sir.

Mr. **Smith.** In order to meet——

Mr. **Calio.** No, sir. In the reprogramming from 1986 functions, I am taking some of those functions out of our 1986 appropriations. I am requesting—and I will give you the formula of how I came by it—I took across the board the restorations and add-ons that were provided, and I computed what percentage had to be taken from them, to make up the $9.3 million. That came out to be 17 percent.

Mr. **Smith.** But that is the point. You start out with your request for 1986.

Mr. **Calio.** Yes, sir.

Mr. **Smith.** Then we have an appropriations bill.

Mr. **Calio.** Yes, sir.

Mr. **Smith.** Whereas, we arrive at that at a combined Congressional and Administration appropriation.

Mr. **Calio.** Yes, sir.

Mr. **Smith.** Then we have Gramm-Rudman sequestration.

Mr. **Calio.** Yes, sir.

Mr. **Smith**. Then, to solve your RIF and furlough problem, you take it only out of what we added on and restored in the Congress.

Mr. **Calio**. Part of it.

Mr. **Smith**. And so you are solving your personnel problem by taking out of one part of what was compromised.

Mr. **Calio**. Part of it, that is correct; part of it.

Mr. **Smith**. Why should we reprogram for you when you are going to do that? You are trying to go back and renegotiate something that was already settled.

Mr. **Calio**. That is why we are resubmitting the reprogramming action for your consideration; yes, we are.

Mr. **Smith**. So we don't reprogram, and then what happens? How are you going to handle it?

Mr. **Calio**. Then I am back to the 4.3 across the board, and I will have to furlough people or RIF and do what is necessary.

Mr. **Smith**. I tell you I think you had better figure out a reprogramming that doesn't take it all out of congressional add-ons and restorations, if you don't want to do that. Don't just come up here taking the easy way out.

BASE PROGRAMS

Mr. **Calio**. When I get into the base programs, I guess the way I can interpret what you have just said is you have approved what we requested, what the President requested in 1986, as a base mission.

Mr. **Smith**. Right.

Mr. **Calio**. And in addition, you thought we should be appropriated $249 million more.

Mr. **Smith**. Yes.

Mr. **Calio**. And of that $249 million—I concluded that $48 million was still available, of the add-ons and restorations.

Mr. **Smith**. Yes.

Mr. **Calio**. For consideration to solve the Gramm-Rudman problem. And that is what I assessed by the 17 percent.

You are asking me to go back and assess the base mission which you also approved.

Mr. **Smith**. I don't know just how you do it, but don't come up here to solve your RIF problems. I am sympathetic. I don't like to RIF and furlough people temporarily. I would rather let attrition take care of this problem if we can. But don't try to solve your 1986 RIF and furlough program all out of what we restored and added on.

Mr. **Calio**. I understand what you are saying to me, yes, sir.

Mr. **Smith**. Figure out some other way to do it.

Mr. Dwyer.

Mr. **Dwyer**. No more questions.

Mr. **Smith**. I could go through each one of these areas.

Mr. **Calio**. I understand what you are saying to me.

Mr. **Smith**. You understand what I am saying?

Mr. **Calio**. Yes, sir.

Mr. **Smith**. It is not that we want to RIF or furlough anybody, because we don't want to, if we can keep from it.

Mr. Calio. But I will cut into base mission, which I understand you, through your appropriation, agree with.

Mr. Smith. We don't like to cut into those things, but we don't want to solve all of the problem out of the things we added on and restored.

Mr. Calio. Yes, sir. I understand what you are saying to me, Mr. Chairman.

Mr. Smith. It is not going to be easy. We are going to end up with some things we don't want; I know that. But let's work together and see if we can figure out a more satisfactory way.

Mr. Calio. I will do that.

Mr. Smith. I don't think really there is the necessity of going through each one of these. The conversation we have just had applies to a lot of these things.

SATELLITE PROGRAMS/EOSAT

I want to ask you about the satellite program. I asked you something about the satellite program yesterday.

Mr. Calio. Yes, sir; you asked the Secretary.

Mr. Smith. Do you want to expand somewhat on that?

Mr. Calio. There is not much more than what I said to you yesterday. Why don't you state the question for this record and then we will have it in both cases, if you would, sir. I will try to answer the question as best I can.

Mr. Smith. What is the status of this commercialization proposed to be negotiated with and worked with up here for several months?

Mr. Calio. We still have an active contract with EOSAT using the money that had been appropriated for the 1985-1986 time frame. We have entered into discussion with EOSAT, and to how we might be able to work out some arrangement living within the guidance that was provided in the budget request.

We have developed what I consider a reasonable position living within the dollar limits, and yet still carrying out our mission.

I am not trying to hold you off, because we have had proprietary discussions with RCA and Hughes, which would be the same people we would be talking to when we are talking about the various satellite systems.

I just don't feel I could put that on the public record yet until we have had a chance to solidify our contractual arrangements with that company. We are trying to proceed and see if we can live within the intent of the law and see if we can live within our budget guidelines or the President's budget request. And as soon as we can come up here and tell you what we have, we are going to do it.

Mr. Smith. Have you given RCA and Hughes a time limit for agreeing, or have you got any time restraints on this?

Mr. Calio. We have a proposal from them right now, and the meter is running. We are spending money on the concept right now, so it is in our mutual interest to try to get this resolved as quickly as possible so that we use the money that we have in the most effective way. Thirty to sixty days is about what we normally run with proposals, and I would hope that we would have this resolved in about 30 days.

Mr. **Smith**. Then you see it as progressing reasonably well timewise?

Mr. **Calio**. I am always frustrated on time. I wish I could have done it faster than I am doing it.

Mr. **Smith**. It is to their disadvantage, too?

Mr. **Calio**. Oh, absolutely. And all elements are working as best they can, as quickly as they can, to get this issue resolved and a meaningful proposal put forward.

SATELLITE PROGRAMS/LAUNCHES

Mr. **Smith**. What effect does the shuttle disaster have on you?

Mr. **Calio**. On NOAA or on EOSAT, which one?

Mr. **Smith**. Both.

Mr. **Calio**. With respect to the Shuttle, we do not anticipate using the Shuttle until the late 1988, early 1989 time frame.

Mr. **Smith**. You did not?

Mr. **Calio**. We would not, no. Not in any of our plans do we have any requirements for that, until 1988 or 1989. After that time, however, with our new geostationary satellites—and if this proposal from EOSAT moves forward—we will be shuttle-dependent and we will need the Shuttle in the 1989 time frame. And we are working with NASA, the Security Council and DOD to work out arrangements where we will be a part of the manifest to take care of our launches in the 1989 time frame.

So I would hope that they get their problems resolved in a reasonably quick way and regain their schedule of launches.

Mr. **Smith**. You are pretty much, then, affected by whether DOD goes ahead with unmanned——

Mr. **Calio**. No, sir.

Mr. **Smith**. I mean, if they don't, are they liable to crowd you out on your schedule?

Mr. **Calio**. No, sir. We have the launch vehicles acquired, bought for all of the satellites that we plan to launch through the late 1988 time frame, which are Deltas and Atlas-Fs, sir, Atlas Centaurs. We have purchased them. They are in the line. There are tail numbers for them.

So we are not affected by anything that DOD does through the 1988–1989 time frame. At that point, we are.

Mr. **Smith**. If they cancel a number of launches between now and then, those people also will be crowding into that area.

Mr. **Calio**. Granted. But they shouldn't be able to take our launch vehicles.

Ms. **Charles**. The manifesting on the Shuttle for the next go, if DOD slips and is competing with us for those Shuttles.

Mr. **Calio**. In 1989.

Ms. **Charles**. And 1990.

Mr. **Calio**. Yes. That is why I said to you we are working with NASA and the Department of Defense to make sure that we hold our positions.

Mr. **Smith**. It is affected by whether or not they use the Shuttle?

Mr. **Calio**. That is right. We will be Shuttle-dependent in that time frame.

Mr. **Smith**. They have an alternative?

Mr. CALIO. Well, some alternatives. I would be surprised if they can go completely expendable launch vehicle. We might, at some expense, be able to split capabilities, but I am not driving in that direction.

Bill, do you want to say anything more?

Dr. William Bishop, Acting Assistant Administrator for Satellites and Information Service.

SATELLITE PROGRAMS/ONE POLAR

Mr. SMITH. The one Polar satellite system; you mentioned that earlier.

Mr. CALIO. Yes, sir.

Mr. SMITH. Will you expand on that?

Mr. CALIO. Well, we have an opportunity to save $150 million by going to this one Polar system. And as I mentioned before to this committee, or I think we have, it is a dollar versus risk situation. We have the ability in the one Polar system to launch one satellite every 18 months. If we have a failure, we have a 120-day call-up capability. There could be an outage for a period of 120 days.

Mr. SMITH. How serious would that be if that occurred?

Mr. CALIO. I don't think it would be catastrophic. There would be an effect on our guidance models, with the prediction of the weather. We would draw some data from the military satellites, but not the exact kind of data that we normally take with those Polar orbiting satellites. But we have not had—I don't think we have had one Polar orbiting satellite that has a lifetime less than 18 months that got into orbit.

We have a 15—one out of how many?

Mr. BISHOP. NOAA-8 was the only spacecraft of the current design to fail prematurely—it operated 15 months.

Mr. SMITH. Assuming the worst, who would be adversely affected, and to what extent?

Mr. CALIO. The satellite data that goes into the Weather Service prediction model would be affected in that it would not be there, and the component it provides or the incremental increase in skill for that prediction would not be there. We have never been able to quantify exactly what that would be.

Mr. HALLGREN. Mr. Chairman, the impact on very short-range forecast related to the warning would be smallest. The impact on the quality of forecasts would show up more distinctly in days like three, four and five, those types of forecasts.

From a warning point of view, I think the impact would be very small.

Mr. SMITH. On predicting hurricanes and things, then, you are saying——

Mr. CALIO. That is where we use the geostationary satellites. That is the system we have stabilized. We have just put in an order for five new satellites, and we hopefully will have east and west coverage beginning this year. In May, we hopefully will launch the next geostationary from the old buy and will be able to have two satellite coverage.

Mr. SMITH. What about tornadoes?

Mr. **Calio**. This is another reason why I guess we are pushing so hard with these Doppler radars, because in severe storms that is where these Doppler radars in concert with the geostationary data would be able to increase our predictability.

Mr. **Smith**. The reduction in reliability, then, would be primarily of concern to those with economic disadvantages in case you don't have a good estimate. Is that right?

Mr. **Calio**. Yes, I think that is a reasonable assessment, sir.

SATELLITE BACK-UPS

Mr. **Smith**. Does DOD have back-ups for theirs?

Mr. **Calio**. I am trying to understand the question.

Mr. **Smith**. They do, don't they?

Mr. **Calio**. Well, it is hard to say. I am trying to figure out how I can answer that. Maybe the simplest way to get out of it is yes, they really don't have back-ups.

Mr. **Bishop**. They operate their program, Mr. Chairman, much as we do. They replace as needed; as satellites get killed in orbit or one fails, they replace it.

Mr. **Smith**. My question ultimately is, is there some way for you and them to get together and somehow use the same back-up?

Mr. **Calio**. Strangely enough, the instruments onboard are different instruments. We are looking at different things, and all of our data is cross-checked. We exchange data freely now between the Air Force and NOAA. They have total access to our data, and we have to theirs, so that capability does exist today. But they are looking at different things with different instruments. There is a small overlap, but it is not in a critical area.

The soundings are critical for us—we depend primarily on the soundings to measure the temperature and pressure profile of the atmosphere, which we then put into the models.

Mr. **Smith**. You could use a back-up then; is that right?

Mr. **Calio**. They don't make the same measurements we make. They have a different mission. Their mission is entirely different than ours.

Mr. **Smith**. We have got a lot of questions. We have also got some questions here from the authorizing committee, some of which I don't think you can answer right now. We will submit those for the record.

Mr. **Calio**. Thank you very much.

Mr. **Smith**. Thank you.

[Questions and answers for the record follow:]

	Expiration Date	FY 1986 Estimate	FY 1987 Estimate
2. Atmospheric and Hydrological Research			
a. Meteorological Research			
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	$39,612	$33,974
P.L. 92-205, Weather Modification Reporting	9/30/81	100	...
b. Atmospheric Climate Research		9,785	8,789
c. Air Quality Research		10,739	11,783
d. Solar-Terrestrial Services and Research		4,955	4,610
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	25,479	25,182
e. National Climate Program			
P.L. 95-367, National Climate Program Act	9/30/81	1,946	1,148
Subtotal		67,137	60,304
Satellite and Environmental Data and Information Services			
1. Satellite Services			
a. Environmental Satellite Services		48,164	49,002
b. LANDSAT Operations		25,004	23,604
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	73,168	72,606
2. Satellite Systems			
a. Polar Spacecraft and Launching		87,100	24,874
b. Polar Ground Systems		1,250	4,300
c. Geostationary Spacecraft and Launching		145,983	120,530
d. Geostationary Ground Systems		5,796	18,435
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	240,129	168,139
3. Data and Information Services			
a. Climate Data Services		9,575	9,181
b. Ocean Data Services		5,129	5,138
c. Geophysical Data Services		3,514	3,526
d. Assessment, Documentation, and Information Services		4,901	4,889
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	23,119	22,734

Program Support	Expiration Date	FY 1986 Estimate	FY 1987 Estimate
1. Executive Direction and Administration			
a. Executive Direction		$22,068	$22,081
b. Central Administrative Support		24,929	24,904
No Specific Authority		46,997	46,985
c. Retired Pay Commissioned Officers			
P.L. 91-621, NOAA Commissioned Officers Act	N/A	4,632	5,019
d. NACOA			
P.L. 92-158, National Advisory Committee on Oceans and Atmosphere Act of 1977	9/30/82	500	...
e. Facilities			
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	...	1,000
Subtotal		52,129	52,004
2. Marine Services			
a. Ship Operations		36,450	26,104
b. Ship Maintenance and Support Services		22,264	21,407
P.L. 80-373, Coast and Geodetic Survey Activities Act	N/A	58,714	47,511
3. Aircraft Services			
a. Aircraft Operations and Maintenance			
Act of Oct. 1, 1890, National Weather Service Organic Act	N/A	15,805	14,694
Total ORF		1,180,399	902,579

* Amounts within the same line item that were equally divided between supporting legislation.

1/14/86

NATIONAL OCEAN AND ATMOSPHERIC ADMINISTRATION

FY 1986 and FY 1987 Budget Authority by Authorizing Legislation (Dollars in Thousands)

Appropriation and Legislation	P.L. Number As Amended	Expiration Date	FY 1986	FY 1987
Operations, Research, and Facilities:				
Coast and Geodetic Surveys Act	80-373	N/A	$189,129	$150,243
Marine Mammal Protection Act of 1972	92-522	9/30/88	7,624	5,774
Endangered Species Act of 1973	93-205	9/30/85	3,400	2,775
Anadromous Fisheries Conservation Act	89-304	9/30/85	3,250	...
Commercial Fisheries Research and Management Act of 1964	88-309	9/30/85	7,250	...
Magnuson Fishery Conservation and Management Act of 1976	94-265	9/30/85	68,555	50,210
National Ocean Pollution Planning Act	95-273	9/30/82	3,571	3,579
Marine Protection Research and Sanctuaries Act of 1972 (Title II)	92-532	9/30/82	4,835	4,835
Marine Protection Research and Sanctuaries Act of 1972 (Title III)	92-532	9/30/88	2,852	2,196
Deep Seabed Hard Minerals Resource Act	96-283	9/30/86	1,525	1,589
National Sea Grant College Program Act	89-454	9/30/87	40,250	...
National Weather Service Organic Act	10/1/1890	N/A	681,601	586,617
Weather Modification	92-205	9/30/81	100	...
National Climate Program Act	95-367	9/30/81	1,946	1,148
Coastal Zone Management Act of 1972	92-583	9/30/85	5,102	3,679
Coastal Zone Management Act of 1972	92-583	9/30/86	36,000	...
NOAA Commissioned Officers Act	91-621	N/A	4,632	5,019
NACOA Act of 1977	92-158	9/30/82	500	...
NOAA Marine Fisheries Program Authorization Act	98-210	9/30/84	71,280	37,930
No specfic authority		N/A	46,997	46,985
Total, Operations, Research, and Facilities			1,180,399	902,579
Financing:				
CEIF			-8,000	-8,300
FLF				-1,800
FY 1986 Deobligations				-10,000
Total, Budget Authority (ORF)			1,172,399	882,479

Appropriation and Legislation	P.L. Number As Amended	Expiration Date	FY 1986	FY 1987
Promote and Develop:				
Saltonstall-Kennedy (S-K) Act of 1954	83-466	N/A	$8,007	...
Fishermen's Contingency Fund:				
Outer Continental Shelf Lands Act	95-372	N/A	750	...
Fishermen's Guaranty Fund:				
Fishermen's Protective Act of 1967	83-680	N/A	3,000	...
Foreign Fishing Observer Fund:				
American Fisheries Promotion Act	96-561	N/A	4,500	$2,000
Fisheries Loan Fund:				
Fish and Wildlife Act of 1956	84-1024	N/A	...	...
Aviation Weather:				
Tax Equity and Fiscal Responsibility Act of 1982	97-248	9/30/87	28,000	77,500
Total, NOAA			1,216,656	961,979

Questions for the Record by
Congressman Smith

QUESTION:

How are you managing to sustain the reduction of $51,919,000 as a result of the Gramm-Rudman sequestration?

ANSWER:

The reduction has been applied across the board to all programs. A reprogramming proposal is currently under consideration to prevent furloughs and maintain essential weather forecasts and warning services and other high priority programs at their pre-Gramm-Rudman-Hollings level.

QUESTION:

Will you be implementing any RIFS or furloughs as a result of this?

ANSWER:

A reprogramming proposal is under consideration that would negate the need for any RIFS or furloughs.

QUESTION:

Will you be submitting a reprogramming proposal in order to minimize the effect of this sequestration upon your programs and personnel?

ANSWER:

Yes.

QUESTION:

Could you sustain a similar reduction in fiscal year 1987 if a Gramm-Rudman sequestration is necessary?

ANSWER:

A reduction of similar size in FY 1987 most likely would be accommodated by requesting authority to reprogram to maintain essential services.

QUESTION:

Please discuss the detail related to your rescission requests you have submitted?

ANSWER:

Section 306 of the Coastal Zone Management Act provides financial assistance to states to administer their federally-approved coastal management programs.

The program has provided more than $500 million to the States over the past 11 years. State structures are now in place to deal with coastal issues and implement effective coastal management programs. Federally-approved coastal zone management programs have been instituted in 28 coastal states and territories, covering over 90% of the $5,000 mile coast line of the U.S. For these reasons it is proposed that these funds be rescinded.

QUESTION:

Do you plan to implement the other programs not related to the rescission request as appropriated for fiscal year 1986 after Gramm-Rudman?

ANSWER:

All programs not scheduled for rescission are being implemented.

QUESTION:

If the Congress does not enact these rescission requests, how quickly can you obligate the funds for these activities?

ANSWER:

Should Congress not accept the proposed rescissions, NOAA is fully prepared to obligate the funds. State assistance under the CZMA will be awarded in accordance with the normal schedule based on when current Federal funding to states expires.

Fiscal Year 1987 Budget Request: Proposed Language Changes

QUESTION:

Of the proposed language changes you are recommending for fiscal year 1987, there appears to be no significant departure in terms of policy. You are proposing to delete those language items that were one-time nonrecurring activities in fiscal year 1986. Is that correct?

ANSWER:

Yes.

QUESTION:

You are also just proposing changes of dollar amounts for transfers from other funds. Is that correct?

ANSWER:

Yes.

QUESTION:

What is the status of authorizations for your various unauthorized activities for fiscal year 1987?

ANSWER:

The following program authorizations have expired and legislation to reauthorize them has been submitted:

Appropriation and Activity	Existing Authority	Expiration Date	Amount Requested in Budget (in thousands)
Operations, research, & facilities:			
Deep Seabed Hard Minerals Resources Act	P.L. 98-623	September 30, 1986	$ 1,589
National Ocean Pollution Planning Act	P.L. 96-255	September 30, 1985	3,579
Ocean dumping (MPR & SA, Title II)	P.L. 96-381	September 30, 1982	4,835
National Climate Program	P.L. 96-547	September 30, 1981	1,148
Endangered Species	P.L. 97-304	September 30, 1985	2,775
Estuarine Sanctuaries (CZM)	P.L. 96-464	September 30, 1985	1,259
Program Management (CZM)	P.L. 96-464	September 30, 1985	2,420
Magnuson-FCMA	P.L. 94-265	September 30, 1985	50,210
Marine Fisheries Program Authorization Act	P.L. 98-210	September 30, 1984	37,930
Total, NOAA			$105,745

QUESTION:

Please provide for the record a detailed explanation of where the pending authorizations are as of today's date for the unauthorized activities for fiscal year 1987.

ANSWER:

Status of Authorizing Legislation as of 3/14/86

Deep Seabead Hard Minerals Resource Act - $1,589,000

H.R. 4212 was introduced by Mikulski on 2/24/86, and referred to the Commitees on Merchant Marine and Fisheries and Interior and Insular Affairs. It was approved by the subcommittee on Oceanography on 2/26/86. The Committee on Interior and Insular Affairs held a hearing and approved the bill 3/18/86. Markup is slated for 4/9/86.

National Ocean Pollution Planning Act - $3,579,000

H.R. 1958 was introduced by Mikulski on 4/3/85 and referred to the Committees on Merchant Marine and Fisheries and Science and Technology. The subcommittees on Fish and Wildlife and Oceanography approved the bill 4/30/85 and it was reported by the Merchant Marine and Fisheries Committee on 5/15/85. It carries an authorization of $3,567,000.

S.990 was introduced by Danforth on 4/24/85 and referred to the Committee on Science and Transportation which held a hearing 5/3/85, approved the bill 5/9/85, and reported it out 5/22/85. It passed the Senate 6/19/85 and carries an authorization of $3,731,695.

Ocean Dumping (Marine Protection Research and Sanctuaries Act) - $4,835,000

H.R. 1958 was introduced by Mikulski on 4/3/85 and referred to the Committees on Merchant Marine and Fisheries and Science and Technology. The subcommittees on Fish and Wildlife and Oceanography approved the bill 4/30/85 and it was reported by the Merchant Marine and Fisheries Committee on 5/15/85. It carries an authorization of $12,000,000.

S.990 was introduced by Danforth on 4/24/85 and referred to the Committee on Science and Transportation which held a hearing 5/3/85, approved the bill 5/9/85, and reported it out 5/22/85. It passed the Senate 6/19/85 and carries an authorization of $11,113,575.

National Climate Program - $1,148,000

Draft bill is under review by DOC General Counsel and will be submitted to OMB the week of 3/17/86.

Endangered Species - $2,775,000

H.R. 1027 was introduced by Breaux 2/7/85 and referred to the Merchant Marine and Fisheries Committee's subcommittee on Fisheries and Wildlife. The subcommittee held a hearing 3/14/85, approved the bill 5/9/85, and reported it out 5/15/85. It was passed by the House 7/29/85 referred to the Senate Committee on Environment and Public Works 7/31/85 and carries an authorization of $3,800,000.

S.725 was introduced by Chafee on 3/20/85 and referred to the Committee on Environment and Public Work subcommittee on Environmental Pollution which held a hearing 4/16/85. The bill carries an authorization of $3,500,000.

Estuarine Sanctuaries (CZM) - $1,259,000

S.959 was introduced by Danforth on 4/18/85, and referred to the Committee on Science and Transportation. A hearing was held on 5/3/85, the bill approved 5/9/85, and reported out 5/22/85. The bill carries an authorization of $3,061,850.

Program Management (CZM) - $2,420,000

H.R. 2121 was introduced by Mikulski on 4/18/85 and referred to the subcommittee on Fisheries and Wildlife of the Committee on Merchant Marine and Fisheries. The bill was approved 4/24/85, reported out by the Committee on 5/15/85 and passed by the House 7/30/85. The bill carries an authorization of $5,000,000.

Magnuson - FCMA - $50,210,000

H.R. 1533 was introduced by Breaux on 3/19/85 and referred to the Merchant Marine Fisheries Committee's subcommittee on Fisheries and Wildlife. A hearing was held 3/26/85 and the bill was approved by Fisheries and Wildlife on 5/2/85 and by Merchant Marine Fisheries on 5/8/85 and reported out on 6/10/85. The bill carries an authorization of $69,000,000.

S.958 was introduced by Danforth on 4/18/85 and referred to the Committee on Science and Transportation. A hearing was held on 5/6/85, the bill was approved 5/9/85 and reported out on 5/22/85. The bill carries an authorization of $71,639,975.

Marine Fisheries Program Authorization Act - $37,930,000

S.991 was introduced by Danforth on 4/24/85, referred to the Committee on Science and Transportation which approved it 5/9/85, reported it out 5/21/85 and was passed by the Senate 10/2/85. The bill was sent to the House on 10/3/85 and referred to the Committee on Merchant Marine and Fisheries. The bill carries an authorization of $67,621,950.

QUESTION: 870046

Operations, Research and Facilities

The 1987 budget estimates for the Operations, Research and Facilities account is for $836,479,000. This represents a decrease of $249,850,000 from the adjusted 1986 appropriation level. The Gramm-Rudman sequestration was for $50,360,000 in 1986. The estimate assumes a reduction of 1,722 positions from that in fiscal year 1986. How do you plan to reduce these personnel?

ANSWER:

If the proposed decreases are accepted and funds are not available, the reduction-in-force (RIF) procedures that are in effect at that time will be implemented. Of the proposed reduction of positions, 728 are a result of the A-76 program; 260 are administrative or management savings related, and the remainder are associated with programs proposed for reduction or termination.

QUESTION:

Does this involve a RIF?

ANSWER:

Yes it will.

QUESTION:

How many of these can be taken off the roles from attrition purposes?

ANSWER:

To the extent possible, attrition will be used to alleviate the impact of the RIF.

QUESTION:

How many can be located in other Federal agencies through our outplacement activities? And, how many will actually be RIFed?

ANSWER:

It is impossible to say how many people could be placed in other agencies or how many will actually be RIFed. However, every effort will be made to assist employees in finding jobs.

QUESTION:

How much do you expect this to cost the agency in terms of lump sum payments and other related costs for such a large separation in force?

ANSWER:

The amount that would be required for lump sum payments and other related costs is contingent on factors that vary for each employee such as salary, length of service, and age. Once it is determined that a reduction-in-force must be undertaken, it takes approximately nine weeks to complete all of the required actions associated with a RIF. The salary and benefits during the course of the RIF and the severance pay could average between $20,000 and $30,000 per employee. The estimate is based on an average salary of $28K to $35K. The estimated length of service is 15 years, and the estimated age is 45. The length of service and age were used in the FPM Supplement 990-2 as examples on how to calculate severage pay. The estimated cost of $20K to $30K per person is probably low as it does not take into account potential lump sum leave payments or unemployment compensation that the agency is liable for.

QUESTION:

Ocean Research

You are requesting a decrease of $9,635,000 to eliminate the Undersea Research Program. Please provide for the record where your 1986 funds are being provided by geographical location and provide a short summary of the activities for each location.

ANSWER:

NOAA's Undersea Research Programs are being conducted in 1986 in the following locations (total program level of $9,220K after Gramm-Rudman-Hollings sequestration):

Gulf of Maine:	Studies being conducted on benthic productivity and resources including fisheries, sediment dynamics, and benthic ecology; ghost gillnet assessment; incidental mortality of offshore shellfish resources; water column ecology; juvenile fish bottom habitat ecology; and other important biological investigations ($1,792K).
Mid-Atlantic and South Atlantic:	Submarine processes; global oceanic effects of hydrothermal vent activity; ocean quahog growth in natural populations; benthic productivity in shelf waters; and artificial reef dynamics ($2,325K).
Great Lakes:	Fate and effects of pollutants; lake trout spawning habitat assessment; lentic distribution and abundance of larval sea lamprey; geologic processes which affect pollutant pathways; primary production and cycling of nutrients; and deepwater ecology of major prey species ($468K).
Gulf of Mexico:	Fishery development - golden crab ($137K).
Caribbean:	Primary productivity and cycling of nutrients; population dynamics of conch; fishery stock assessment; habitat site survey; accretion in deep, shelf-edge reefs; growth and lower depth of benthic marine macrophytes; other investigations ($2,282K).
Pacific Northwest and Alaska:	Global oceanic effects of hydrothermal vent activity; effects of bottom-trawling on valuable fish, invertebrates and benthic habitat; and coastal ecology ($744K).
Pacific Basin:	Ecology of seamount resources including cobalt-manganese crusts; carbonate and organic metabolism of benthic communities; fish community assessment on artificial reefs; fishery development - deepwater shrimp; secondary metabolites of deepsea invertebrates and submarine terrace and canyon processes ($1,472K).

QUESTION:

You are requesting a decrease of $844,000 related to the Great Lakes Environmental Research Laboratory. What was your request to the Department and what was the Department's request to OMB for this activity?

ANSWER:

Request to DOC: $3.844 million. Request to OMB: $3.844 million

QUESTION:

What activities specifically would be reduced under your proposal from those funded in fiscal year 1986?

ANSWER:

The GLERL research program in Great Lakes Hazards (i.e., projects on surface waves, water level fluctuations, and lake ice) would be eliminated; the Great Lakes Ecosystems Assessment Program would be reduced by eliminating a project on Ecological Succession and Trends. This research provides services to the states surrounding the Great Lakes; those states and the private sector interests which benefit from these studies should assume a greater share of their funding.

QUESTION:

You are proposing a reduction for the Fisheries Oceanography Coordinated Investigations Program of $1,000,000. Please provide for the record what you did with these monies in 1986, and what will be reduced in fiscal year 1987.

ANSWER:

Our strategy in the FOCI program is to focus effort on specific stocks of economically important species, to study these over a period of time sufficient to represent a range of variations in abundance, and to test specific "recruitment" hypotheses against the time series. Two marine spawning populations have been selected for FOCI studies: 1) walleye pollock in Shelikof Strait in the Gulf of Alaska (semipelagic gadoid) and 2) walleye pollock in the Bering Sea (contrast and comparison with Shelikof stock).

The FY 86 program enters the intensive field observation phase. This year's effort focuses on egg and larval development in Shelikof Strait with particular emphasis on environmental factors influencing survival. New techniques, including satellite image processing acoustics, and an in situ egg counter will be developed for future use in the larger Bering Sea. Biological, oceanographic and meteorological observations will be made and relationships among them examined. Data from last year will be analyzed and may demonstrate a dramatic environmental mortality.

The FOCI program was designed to provide short-term answers on pollock recruitment, and longer term forecasting capability for several major fishery stocks. A $2,000,000 level will somewhat reduce the scope of planned field programs to measure the correlation between larval survival and oceanographic and atmospheric conditions, defer the procurement of some equipment, and defer implementation of some new technology into research programs. Research in the Bering Sea will be deferred until after FY 1987.

QUESTION:

You are proposing an elimination of the Seafloor Spreading Processes related to polymetallic sulfides of $1.8 million. (a) Where is this activity conducted? (b) Please describe what comprises this activity?

ANSWER:

(a) The NOAA research program on seafloor processes which we call (VENTS), designed to quantitatively determine the global impact of seafloor hydrothermal venting systems, is located at the Oregon State University Hatfield Marine Science Center in Newport, Oregon. A scientific and technical staff of 15 persons at the Marine Science Center is exclusively dedicated to the seafloor spreading center processes research. Because the scientific scope of the problems being addressed (i.e., the global impact of hydrothermal venting systems) is large, additional scientific expertise located elsewhere in NOAA laboratories is also utilized to achieve VENTS objectives. For the same reason, the VENTS Program also increases its scientific capabilities at the Marine Science Center through collaborative research efforts with academic institutions, especially Oregon State University.

(b) Research objectives of the NOAA seafloor spreading center VENTS program are directed at formulating and testing quantitative and predictive models of (global) vent-associated processes.

Research is focused on determining the effects of venting on ocean chemical and thermal budgets. Hydrothermal venting is now recognized to be a major source of both heat and mass flux at the earth's surface. The chemical composition of the ocean appears to be profoundly affected by the influx of both particulate and dissolved materials from seafloor hydrothermal vents, which are now known to be distributed along the 60,000km world seafloor spreading center system. Research is directed toward detecting and measuring the composition and fate of the vent effluent in the oceanic water column and in the sediments and how vent materials are mitigated by the biological communities which live on the seafloor and within the water column in the vicinity of the vents.

One aspect of the research concerns the physical factors governing the location, size and duration of the hydrothermal venting. This research addresses the chronological and mineralogical record of venting preserved in the rocks, sediments, and sulfide deposits in the vent environment.

Long-term quantitative measurements are being made using instrumentation specifically designed to be deployed within the vents in seafloor laboratories.

QUESTION:

Ocean Services

You are requesting a decrease of $2,700,000 related to opening NOAA ports rather than establishing regional centers. How is the closing of the two regional centers coming along?

ANSWER:

Plans are almost complete for the closing of the Northwest Regional Ocean Service Center in Seattle and the Alaska Ocean Service Center in Anchorage. Effective in April, 1986, these centers will be converted to the NOAA Information Center.

QUESTION:

You are requesting a decrease of $5,800,000 related to eliminating lower priority ocean assessment activities. What are these lower priority ocean assessment activities? What are the higher priority activities that you would be funding under these programs? Is the work finished in this area?

ANSWER:

The decrease of 20 positions and $5,800,000 proposed for the ocean assessments program will reduce, but not eliminate, activities in (1) the National Status and Trends Program, which assesses the status and trends of environmental quality in coastal and estuarine areas through measurements of the concentrations of synthetic organics and other toxic compounds in bivalves (mussels, clams, and oysters), bottomfish, and sediments at sampling sites throughout the U.S.A.; (2) water quality sampling and modeling of Mid-Atlantic and Gulf of Mexico coastal waters; (3) applied research and assessments of the consequences of contaminants on coastal and estuarine environmental quality (particularly the effects of toxic compounds on the reproductive capabilities of fish populations); (4) generic ocean disposal assessment and research activities; and (5) resources allocated to the NOAA Quality Assurance Program for Environmental Quality Measurements. The proposed reduction will not alter the program direction but will extend the time necessary for gathering required data.

QUESTION:

You are requesting a decrease of $300,000 related to a circulatory survey program. Has this survey program been completed?

ANSWER:

The proposed reduction in the Circulation Survey Program is not an indication that the program is completed. The program is being modified to reduce the number, complexity and cost of field surveys and to increase work on circulation numerical models.

QUESTION:

You are requesting a decrease of $100,000 related to tides and water levels program. Has this been completed?

ANSWER:

Presently, one real-time tide telemetry system has been installed in the Chesapeake Bay entrance. Three additional systems will be installed by the end of the fiscal year. Operation and maintenance of these systems will be sought from the users.

QUESTION:

Conceivably what would the level of funding be in fiscal year 1987 if the work were not completed and needed to be funded again for one more fiscal year?

ANSWER:

Funds for the Chesapeake Bay telemetry systems are sufficient to complete the systems.

QUESTION:

Sea Grant

You are proposing to eliminate the Sea Grant program. Please provide for the cord the institutions that received funding and the level of assistance provided in fiscal year 1985, and should the rescission not be approved what your plans for fiscal year 1986 allocation of these funds are.

ANSWER:

The institutions on the attached list received the funding indicated for FY 1985. In those instances in which more than one institution received funding under the grant, the other institutions are listed, but only the total amount of the grant from the Department is indicated.

Since decisions on most of the proposals requesting funding for FY 1986 are still pending in part or whole, it is not possible to indicate what amounts will be awarded to the various participating institutions. However, we expect the 29 major programs to continue at approximately the FY 1985 levels since the rescission was not approved.

SEA GRANT
PARTICIPATING INSTITUTIONS LISTED BY STATE

FY 85

ALABAMA (SEE MISSISSIPPI/ALABAMA)

ALASKA

UNIVERSITY OF ALASKA SEA GRANT COLLEGE PROGRAM - $1,312,000
- UNIVERSITY OF ALASKA, FAIRBANKS
- UNIVESITY OF ALASKA, ANCHORAGE
- UNIVERSITY OF ALASKA, JUNEAU
- NORTHERN SOUTHEAST REGIONAL AQUACULTURE ASSOCIATION

ARIZONA

UNIVERSITY OF ARIZONA, TUCSON - $42,200

CALIFORNIA

UNIVERSITY OF CALIFORNIA SEA GRANT COLLEGE PROGRAM - $2,964,000
- UNIVERSITY OF CALIFORNIA, BERKELEY
- UNIVERSITY OF CALIFORNIA, SAN DIEGO
- UNIVERSITY OF CALIFORNIA, SANTA BARBARA
- HUMBOLDT STATE UNIVERSITY
- UNIVERSITY OF CALIFORNIA, SANTA CRUZ
- UNIVERSITY OF CALIFORNIA, DAVIS
- SAN JOSE STATE COLLEGE
- SAN DIEGO STATE UNIVERSITY
- UNIVERSITY OF CALIFORNIA, IRVINE
- UNIVERSITY OF CALIFORNIA, RIVERSIDE
- UNIVERSITY OF THE PACIFIC
- CALIFORNIA STATE UNIVERSITY, LONG BEACH

UNIVERSITY OF SOUTHERN CALIFORNIA SEA GRANT PROGRAM - $675,000
- UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

CONNECTICUT

UNIVERSITY OF CONNECTICUT SEA GRANT PROGRAM - $470,000
- UNIVERSITY OF CONNECTICUT, GROTON

DELAWARE

DELAWARE SEA GRANT COLLEGE PROGRAM - $1,050,000
- UNIVERSITY OF DELAWARE

DISTRICT OF COLUMBIA

AMERICAN GEOPHYSICAL UNION - $2,000

FLORIDA

FLORIDA SEA GRANT COLLEGE PROGRAM - $1,545,000
- UNIVERSITY OF MIAMI
- UNIVERSITY OF SOUTH FLORIDA
- UNIVERSITY OF FLORIDA, GAINESVILLE
- FLORIDA ATLANTIC UNIVERSITY
- FLORIDA STATE UNIVERSITY
- FLORIDA INSTITUTE OF TECHNOLOGY
- MOTE MARINE LABORATORY

GEORGIA

GEORGIA SEA GRANT PROGRAM - $1,000,000
- UNIVERSITY OF GEORGIA, ATHENS
- SKIDAWAY INSTITUTE OF OCEANOGRAPHY, SAVANNAH

HAWAII

UNIVERSITY OF HAWAII SEA GRANT COLLEGE PROGRAM - $1,526,500
- UNIVERSITY OF HAWAII
- UNIVERSITY OF GUAM

ILLINOIS/INDIANA

ILLINOIS/INDIANA SEA GRANT PROGRAM - $190,000
- UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN
- SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE
- LOYOLA UNIVERSITY OF CHICAGO
- BALL STATE UNIVERSITY
- PURDUE UNIVERSITY

INDIANA (SEE ILLINOIS/INDIANA)

LOUISIANA

LOUISIANA SEA GRANT COLLEGE PROGRAM - $1,189,800
- LOUISIANA STATE UNIVERSITY

MAINE/NEW HAMPSHIRE

MAINE/NEW HAMPSHIRE SEA GRANT COLLEGE PROGRAM - $1,440,000
- UNIVERSITY OF MAINE
- UNIVERSITY OF MAINE SCHOOL OF LAW, PORTLAND
- MAINE DEPARTMENT OF MARINE RESOURCES
- BIGELOW LABORATORY FOR OCEAN SCIENCES
- UNIVERSITY OF NEW HAMPSHIRE

MARYLAND

MARYLAND SEA GRANT COLLEGE PROGRAM - $1,024,000
- UNIVERSITY OF MARYLAND, COLLEGE PARK
- JOHNS HOPKINS UNIVERSITY
- UNIVERSITY OF MARYLAND, HORN POINT ENVIRONMENTAL LABORATORIES
- UNIVERSITY OF MARYLAND CHESAPEAKE BIOLOGICAL LABORATORY, SOLOMONS

MASSACHUSETTS

MIT SEA GRANT PROGRAM - $1,700,000
- BOSTON UNIVERSITY
- MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HARVARD - $66,000

WOODS HOLE OCEANOGRAPHIC INSTITUTION SEA GRANT PROGRAM - $771,300
- WOODS HOLE OCEANOGRAPHIC INSTITUTION

MICHIGAN

MICHIGAN SEA GRANT COLLEGE PROGRAM - $1,000,000
- UNIVERSITY OF MICHIGAN, ANN ARBOR
- MICHIGAN STATE UNIVERSITY
- MICHIGAN TECHNOLOGICAL UNIVERSITY

MINNESOTA

MINNESOTA SEA GRANT INSTITUTE - $720,000
- UNIVERSITY OF MINNESOTA, DULUTH
- UNIVERSITY OF MINNESOTA, TWIN CITIES

MISSISSIPPI/ALABAMA

MISSISSIPPI/ALABAMA SEA GRANT CONSORTIUM - $950,000
- MISSISSIPPI STATE UNIVERSITY
- UNIVERSITY OF MISSISSIPPI
- UNIVERSITY OF SOUTHERN MISSISSIPPI
- GULF COAST RESEARCH LABORATORY
- JACKSON STATE UNIVERSITY
- UNIVERSITY OF ALABAMA, TUSCALOOSA
- UNIVERSITY OF SOUTH ALABAMA
- UNIVERSITY OF ALABAMA, BIRMINGHAM

NEW HAMPSHIRE - (SEE MAINE/NEW HAMPSHIRE)

NEW JERSEY

NEW JERSEY MARINE SCIENCES CONSORTIUM SEA GRANT PROGRAM - $667,000
- STEVENS INSTITUTE OF TECHNOLOGY
- RUTGERS UNIVERSITY
- PRINCETON UNIVERSITY

RIDER COLLEGE
NEW JERSEY INSTITUTE OF TECHNOLOGY
LEHIGH UNIVERSITY

NEW YORK

NEW YORK SEA GRANT INSTITUTE - $2,063,000
- STATE UNIVERSITY OF NEW YORK
- CORNELL UNIVERSITY
- STATE UNIVERSITY OF NEW YORK AT STONY BROOK
- STATE UNIVERSITY OF NEW YORK AT BUFFALO
- STATE UNIVERSITY OF NEW YORK AT SYRACUSE
- STATE UNIVERSITY COLLEGE AT OSWEGO
- CLARKSON COLLEGE OF TECHNOLOGY
- ST. JOHN'S UNIVERSITY

NORTH CAROLINA

UNIVERISTY OF NORTH CAROLINA SEA GRANT COLLEGE PROGRAM - $1,240,000
- UNIVERSITY OF NORTH CAROLINA

- EAST CAROLINA UNIVERSITY, GREENVILLE
- UNIVERSITY OF NORTH CAROLINA, WILMINGTON
- NORTH CAROLINA A&T UNIVERSITY
- DUKE UNIVERSITY

OHIO

OHIO SEA GRANT PROGRAM - $586,500
- OHIO STATE UNIVERSITY
- MEDICAL COLLEGE OF OHIO
- UNIVERSITY OF TOLEDO
- PEACE WESTERN RESERVE
- HEIDLEBURG COLLEGE

OKLAHOMA

UNIVERSITY OF OKLAHOMA, NORMAN - $81,800

OREGON

OREGON SEA GRANT COLLEGE PROGRAM - $2,217,200
- OREGON STATE UNIVERSITY, CORVALLIS
- UNIVERSITY OF OREGON LAW SCHOOL
- OREGON HEALTH SCIENCE UNIVERSITY
- LEWIS AND CLARK COLLEGE LAW SCHOOL

PENNSYLVANIA - (SEE NEW JERSEY)

RHODE ISLAND

RHODE ISLAND SEA GRANT COLLEGE PROGRAM - $1,583,000
- UNIVERSITY OF RHODE ISLAND

NATIONAL SEA GRANT DEPOSITORY - $94,500

SOUTH CAROLINA

SOUTH CAROLINA SEA GRANT CONSORTIUM - $739,000
- SOUTH CAROLINA MARINE RESOURCES CENTER
- CLEMSON UNIVERSITY
- UNIVESITY OF SOUTH CAROLINA
- SOUTH CAROLINA STATE COLLEGE
- COLLEGE OF CHARLESTON
- MEDICAL UNIVERSITY OF SOUTH CAROLINA

TEXAS

TEXAS A&M UNIVERSITY SEA GRANT COLLEGE PROGRAM - $1,826,500
- TEXAS A&M UNIVERSITY, COLLEGE STATION
- TEXAS A&M UNIVERSITY, GALVESTON
- UNIVERSITY OF TEXAS AT AUSTIN
- UNIVERSITY OF HOUSTON
- BAYLOR COLLEGE OF MEDICINE
- UNIVERSITY OF HOUSTON, CLEAR LAKE
- UNIVERSITY OF TEXAS AT PORT ARANSAS

VIRGINIA

VIRGINIA GRADUATE MARINE SCIENCE CONSORTIUM SEA GRANT PROGRAM - $1,235,000
- VIRGINIA INSTITUTE OF MARINE SCIENCE
- VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
- UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE
- OLD DOMINION UNIVERSITY, NORFOLK
- GEORGE MASON UNIVERSITY, FAIRFAX
- KELTECH. INC.

WASHINGTON

WASHINGTON SEA GRANT PROGRAM - $2,328,000
- UNIVERSITY OF WASHINGTON, SEATTLE
- EASTERN WASHINGTON UNIVERSITY
- WASHINGTON STATE UNIVERSITY
- WASHINGTON DEPARTMENT OF NATURAL RESOURCES, OLYMPIA
- WASHINGTON DEPARTMENT OF FISHERIES

WISCONSIN

WISCONSIN SEA GRANT INSTITUTE - $1,900,000
- UNIVERSITY OF WISCONSIN, MADISON
- UNIVERSITY OF WISCONSIN, GREEN BAY
- UNIVERSITY OF WISCONSIN, MILWAUKEE
- UNIVERSITY OF WISCONSIN, STEVENS POINT
- MEDICAL COLLEGE OF WISCONSIN

U.S. TERRITORIES AND POSSESSIONS

GUAM - (SEE HAWAII)

PUERTO RICO

UNIVERSITY OF PUERTO RICO SEA GRANT PROGRAM - $548,200
    UNIVERSITY OF PUERTO RICO
    COLLEGE OF THE VIRGIN ISLANDS

QUESTION:

Coastal Management

You are proposing to eliminate the Coastal Zone Management program which provides state assistance grants for planning purposes. Please provide for the record the allocation of funds for fiscal year 1985 under this program and in addition should the rescission be overturned what the level of resources allocated to each state participating in the program would be for fiscal year 1986.

ANSWER:

Listed below are the allocations for FY 1985 and the possible FY 1986 allocations should the rescission request not be accepted by Congress.

FY 1985 SECTION 306 COASTAL MANAGEMENT ALLOCATIONS

STATE	FY 1985 FORMULA ALLOCATION
Alabama	$ 611,000
Alaska	2,000,000
American Samoa	478,000
California	2,000,000
Connecticut	796,000
Delaware	584,000
Florida	2,000,000
Guam	482,000
Hawaii	750,000
Louisiana	2,000,000
Maine	1,629,000
Maryland	2,000,000
Massachusetts	1,289,000
Michigan	2,000,000
Mississippi	549,000
New Hampshire	504,000
New Jersey	4,000,000*
New York	2,000,000
North Carolina	1,600,000
Northern Marianas	490,000
Oregon	913,000
Pennsylvania	754,000
Puerto Rico	1,175,000
Rhode Island	624,000
South Carolina	1,412,000
Virgin Islands	493,000
Washington	2,000,000
Wisconsin	867,000
TOTAL	$ 36,000,000

* Includes $2,000,000 for beach restoration.

CZMA - SECTION 306 FUNDS
PRELIMINARY PLANNING ALLOTMENTS
(April 2, 1986)

STATE	FUNDING
Alabama	$ 608,000.00
Alaska	1,914,000.00
American Samoa	461,000.00
California	1,914,000.00
Connecticut	821,000.00
Delaware	579,000.00
Florida	1,914,000.00
Guam	467,000.00
Hawaii	761,000.00
Louisiana	1,914,000.00
Maine	1,685,000.00
Maryland	1,914,000.00
Massachusetts	1,332,000.00
Michigan	1,914,000.00
Mississippi	540,000.00
New Hampshire	490,000.00
New Jersey	1,914,000.00
New York	1,914,000.00
North Carolina	1,656,000.00
North Marianas	475,000.00
Oregon	943,000.00
Pennsylvania	779,000.00
Puerto Rico	1,213,000.00
Rhode Island	621,000.00
South Carolina	1,460,000.00
Virgin Islands	478,000.00
Washington	1,914,000.00
Wisconsin	896,000.00
TOTAL	$ 33,491,000.00

QUESTION:

Mapping, Charting and Geodesy Programs

You are requesting again that increased prices be authorized related to the mapping and charting fees to cover overhead costs. This is combined with a budget reduction request of $1,318,000. What is the status of the authorization related to this activity?

ANSWER:

Legislation to increase the price of charts sold to the public has been passed by the Congress and is awaiting signature by the President. The $1,318,000 reduction is not related to the increase in public chart prices. The reduction represents the reimbursement that is expected from Federal agencies for their respective shares of the indirect costs associated with compilation and data base maintenance work.

QUESTION:

You are proposing to eliminate the funds provided in 1986 of $500,000 for the vertical network readjustment activities. What will be conducted in the fiscal year 1986 as a result of this funding and what will be eliminated or not conducted in 1987 as a result of the reduction?

ANSWER:

During FY 1986, the $500,000 will be used to obtain newly observed field data to strengthen the United States primary vertical control network. The table below lists the routes of the leveling data obtained with these funds.

- El Reno via Chickasha and Duncan, Oklahoma, to Bowie, Texas;
- Ft. Worth via Greenville-Denison, Texas, to Durant-Idabel, Oklahoma, to Ashdown, Arkansas;
- Ashdown via Texarkana to Garland, Arkansas;
- El Reno via Kingfisher to Enid, Oklahoma;
- Medford, Oklahoma, via Anthony to Kingman, Kansas; and
- Kingman via Pratt and Dodge City to Garden City, Kansas.

The proposed reduction of $500,000 for the vertical network readjustment program in FY 87 will be taken from the field releveling program. Approximately 1,500 kilometers of releveling will be accomplished later as a result. This releveling will be in the following States: Arkansas (northern), Illinois (northern), Iowa, Kansas (northeastern), Minnesota (western), Missouri (southwestern), Nebraska (eastern), and South Dakota (eastern).

QUESTION:

Please discuss what has been done in the past three years with monies provided for the State Geodesy programs, and what will not be conducted in fiscal year 1987 as a result of this reduction.

ANSWER:

Included in this budget item are the Geodetic Advisor Program, the Mark Maintenance Program, the dissemination of geodetic data and information, and the South Carolina Geodetic Program. The South Carolina Program is addressed in the next question.

Geodetic data products and information are routinely produced, sold, and distributed by the National Geodetic Information Branch to a wide variety of geodetic data users. The service has recently been upgraded to include digital geodetic data products. The proposed reduction retains user access to the geodetic products and information already developed and leaves some development of new products to the private sector.

The Geodetic Advisor Program is a cost sharing effort with the states to transfer the latest technology and methods. Advisory services are now provided in Alaska, Arizona, Florida, Louisiana, Maryland, Massachusetts, Montana, New Hampshire, Oregon, Pennsylvania, Rhode Island, South Carolina, Washington, and Wisconsin.

Maintenance of the over 750,000 monumented control points of the National Geodetic Reference System (NGRS) has been a major responsibility of the Regional Coordinators. Each year, during the past 3 years, approximately 500 vertical and 1,000 horizontal marks were reset and 2,000 vertical and 4,000 horizontal marks were recovered.

With a reduction of $550,000 in these activities, other Federal, State, and local agencies and private surveyors will be expected to voluntarily replace and relocate NGRS monuments in FY 87 and beyond. They will obtain guidance and assistance from the technical services and coordination functions remaining in the reduced program.

QUESTION:

Please provide for the record what the State specific geodesy surveys of $400,000 were conducting in 1986, and what will not be done in 1987 as a result of your proposed reduction.

ANSWER:

In FY 86, NOAA completed a major horizontal framework survey in Central South Carolina and reviewed technical specifications and processed new field data for over 800 kilometers of leveling projects. In FY 87, the program would be continued by the state utilizing NOAA trained state personnel.

QUESTION:

Please provide for the record what has been conducted in the multi-purpose cadastre system that was funded in 1986 for Louisiana at a cost of $750,000.

ANSWER:

The funding for this program has been reduced to $718K as the result of a Gramm-Rudman-Hollings budget cut. The activities completed in 1986 on the multipurpose cadastre pilot projects in Jefferson and Calcasieu Parishes in Louisiana include the development of a comprehensive technical plan, negotiation of agreements with the Parishes, inventory existing geodetic system, basic horizontal and vertical geodetic framework surveys, densification surveys for densely populated and economically intensive areas of the Parishes, initial analysis of the base mapping requirements, and data base development.

QUESTION:

Information Collection and Analysis

You are proposing a decrease of $2,961,000 related to resource surveys and protected species research. Please detail for the record each one of these decreases related to species and resource surveys for fiscal year 1987, and what will not be conducted during fiscal year 1987 that was conducted in 1986.

ANSWER:

The FY 1987 budget proposal provides $13.7 million for resource survey activities and $3.5 million for protected species research to meet management needs for U.S. fish, marine mammals an endangered species. The following items, funded in FY 1986, but not required to meet management objectives for FY 1987 would not be conducted:

Resource survey activities

- Multi-species (e.g., herring, groundfish) recruitment studies in the North Atlantic including plankton ecology, larval fish dynamics, and marine ecosystems research - $364K
- South Carolina contract for South Atlantic reef fish resource assessment surveys - $400K
- Development of a North Pacific ecosystem model for multi-species stock abundance and distribution - $402K
- Galveston, TX, lab (SEC consolidation) - $327K
- Bay St. Louis, MS - Advance technology applications - $193K

Protected species research

- Field trials of turtle excluder trawl; the current level of sea turtle survey and population analysis activity in the Southeast and Carribbean would be significantly reduced - $500K.
- Research for bowhead whales - $600K
- Research for Hawaiian monk seals - $175K

QUESTION:

You are proposing a decrease of $5,133,000 related to research on the effect of habitat conditions on fish stocks. Please detail for the record exactly which fish stocks are being discussed and where these activities took place in terms of geographical facilities.

ANSWER:

The proposed FY 1987 budget provides $6.3 million for habitat research in support of FY 1987 management needs. The proposed habitat program reduction of activities not required to meet FY 1987 management needs include the following research activities:

Facility/Location	Species Involved	Proposed Reduction
o Sandy Hook, NJ/Mid-Altantic Coastal Waters, Raritan Bay	Bluefish, Winter Flounder, Bloodworms, Polycheate worms	(-$2,356)
o Oxford, MD/Chesapeake Bay, MD-Atlantic Coastal Waters Narragansett Bay	Cod, Haddock, Winter Flounder, Yellowtail Flounder, Clams, Mussels, Oysters, Crabs	(-$759)
o Beaufort, NC/S.E. Estuaries	Shrimp, Croaker, Menhaden, Mackerel, Flounder	(-$335)
o Galveston, TX/Galveston Bay, Western Gulf of Mexico	Shrimp	(-$95)
o Honolulu, HI/Hawaiian Archipeligo	Reef Fishes, Sea Turtles	(-$500)
o Seattle, WA + Auke Bay AK/ Columbia River, Auke Bay, Bering Sea	Salmon, Herring, Crab, Shrimp	(-$907)
o Washington, D.C./Program Support		(-$181)

QUESTION:

You are proposing a decrease of $3,100,000 related to fisheries statistics. Please detail for the record where these activities took place geographically, and what will not be conducted in 1987 that was conducted in 1986.

ANSWER:

The proposed FY 1987 budget provides $5.9 million for fisheries statistics to support FY 1987 fisheries management needs. The proposed fisheries statistics program reduction includes the following reductions in socio-economic and harvesting data collection and market news related activities that are not required to meet FY 1987 fisheries management needs:

o Northeast	- $ 504
o Southeast	- 1,835
o Southwest	- 467
o Northwest/Alaska	- 90
o Headquarters	- 204
Total	-$3,100

QUESTION:

Please detail for the record the geographical location and activities related to the $974,000 reduction related analysis of ecosystems, near shore fisheries, and stock abundance.

ANSWER:

The proposed FY 1987 budget provides $16.7 million for information analysis and dissemination of fishery data to support FY 1987 fisheries management needs. The proposed reduction in efforts to improve analysis for fishery resource predictions and environmental/fisheries habitat management include the following items that are not required in FY 1987 for fisheries management:

- Sandy Hook, NJ - Environmental data analysis/information management (-$103)
- Beaufort, NC - Menhaden stock assessment and ecosystem data analysis (-$635)
- Miami, FL - Oceanic pelagics data analysis/information management (-$150)
- Tiburon, CA - Groundfish stock assessment support (-$86)

QUESTION:

You are proposing to terminate the aquaculture program for which $3,097,000 was appropriated in 1986. Please provide for the record the locations funded by this activity.

ANSWER:

The aquaculture program is proposed for termination (-28/$3,097K) in FY 1987. The termination of this low priority program will help reduce the deficit and stops Federal activity within NOAA for a type of activity that is more appropriate for the private sector.

The following locations are effected:

- Galveston Lab (TX) -- non-salmonid R+D such as the sea turtle head start program and shrimp aquaculture (-6/$538K) -- closure
- Milford Lab (CT) -- molluscan research (-9/$1,402K) -- reduction
- Newport (OR) - program administration (-$350) includes FY 1985 add-on $50K -- terminates NOAA funding
- Stuttgart (AR) -- catfish farming -- (-$375) - includes FY 1985 add-on $205K -- terminates NOAA funding
- Washington (DC) -- share of program administration costs - (-13/-$432K)

QUESTION:

You are proposing to eliminate various studies and research projects including Chesapeake Bay studies, SEAMAP, MARFIN, and Fishing Gear Entanglement studies of $9,918,000. Please detail for the record the specific components of this reduction, where they were conducted, and what will not be conducted in fiscal year 1987 as a result of this reduction.

ANSWER:

The following reductions are comprised of FY 1985 and FY 1986 Congressional add-ons with the exception of the $918,000 for westcoast groundfish. In all cases, high priority research will continue under the proposed FY 1987 budget at the following levels to meet FY 1987 management needs; resource survey activities $13.7 million; fisheries biology $6.2 million; habitat research $6.3 million; and anadromous fisheries research $13.2 million.

Chesapeake Bay Studies (-$1,500K) - Bay area. Eliminates contract projects with concerned states to develop a resource monitoring program for the Bay.

SEAMAP (-$1,000K) - reduces state and university contracts in Southeast used to collect fish stock data. High priority data collection will be continued by NMFS.

MARFIN (-$2,850K) - eliminates the marine fisheries initiative for developing latent resources in the Southeast and Gulf of Mexico.

Fishing Gear Entanglement Research (-$750K) - eliminates debris and gear entanglement mortality studies for Northeast, Alaska, and Hawaiian Islands areas.

PCB Contamination Research (-$400K) Charleston, S.C. Analysis of data from survey of East Coast bluefish contamination levels will be completed by FY 1987.

Habitat Evaluation Methodology - (-$1,000K) - This research is administered by the Southeast Center in Miami. Research is to develop effective/standard monitoring methods which can be used to help implement NOAA's habitat conservation policy, to analyze degree of compliance with NOAA's habitat recommendations on permits, and to quantify the value of habitats important to living marine resources.

West Coast Groundfish Research (-13/-$918K) Tiburon, CA. The research supports the Pacific Coast groundfish management plan.

Right Whale Research (-$500K) University of Rhode Island. Study the low number of Atlantic Coast right whales.

Oregon Institute of Marine Biology (-$650K) Charleston, OR. These funds will be used for construction of a boat dock, research staging area, and overnight facilities for visiting researchers and faculty. Construction will be completed in FY 1986.

Limnological Research (-$350K) Environmental Research Center, University of Nevada (Las Vegas). Research focuses on benthic population in Lake Mead and along the Colorado river.

QUESTION:

Please detail for the record the effects of the elimination of the Salmon Enhancement activities in Alaska for which $3,350,000 was appropriated in fiscal year 1986 and the specific locations involved in this activity.

ANSWER:

The $3,350,000 appropriated in the FY 1986 budget was provided for contracting with the Alaska Department of Fish and Game to carry out enhancement efforts which complement implementation of the U.S. - Canada Pacific Salmon Treaty. This amount was matched by the State. This effort is to enhance production and improve survival of juvenile salmon, mainly in South Eastern Alaska. The FY 1987 budget provides $12 million for the U.S./Canada Salmon Treaty. Research under this program has not identified any enhancement requirements.

QUESTION:

You are proposing to reduce by $1 million specific Salmon Treaty funding. Does this violate the Salmon Treaty?

Can it be reduced further?

ANSWER:

The $12 million level does not violate the Treaty. The Treaty and the authorizing legislation do not specify funding levels. The flexibility of annual appropriations levels has many variables and depends on performance of the fishery each year. We are and will contine to monitor the situation. The $12 million requested in the FY 1987 budget represents the amount needed to meet U.S. obligations under the Treaty.

QUESTION:

Please provide for the record the details related to the reduction of $1,500,000 in marine mammal research funds.

ANSWER:

The FY 1987 budget provides $3.5 million for protected species research to support the management of marine mammals and endangered species. The following activities conducted in FY 1986 and not required in FY 1987 to support protected species management:

- Southeast; reduces assessment of tursiops (dolphin) populations - $200K
- Northeast; reduces marine mammal research - $100K
- Northwest; reduces marine mammal lab, and bowhead and fur seal research - $1,100K
- Headquarters; endangered species program administration - $100K

QUESTION:

Do you feel that using funds from the Fisheries Loan Fund is proper for the funding of the five-year dolphin monitoring program in the eastern tropical Pacific?

ANSWER:

Yes. There were no funds appropriated for loans in FY 1986, and the program has been terminated. Given the obvious budget constraints, the use of 1985 carryover unobligated balances in the fund to meet the requirements of a five year dolphin monitoring program under the recent amendments to the Marine Mammal Protection Act is appropriate.

QUESTION:

Conservation and Management Operations

You are proposing a reduction of $3,500,000 to Regional Fishery Management Councils. Please provide for the record which councils would receive funding, and what activities would not be conducted by these councils in 1987 as a result of this reduction that were conducted in fiscal year 1986.

ANSWER:

The decrease reduces efforts aimed at lower priority fisheries within the FCZ by reducing travel, number of meetings, administrative costs, state liaison, and program funds.

The reductions can be assessed by one of the following ways:

- across-the-board reduction by Council
- analysis of each Council's funding requirements based on planned FMPs
- possible consolidation of Councils to reduce total number.

During FY 1986, a panel of outside experts will conduct a review to assess the effectiveness of current fisheries management practices and evaluate alternative strategies and institutional arrangements. Until the panel reports its recommendations, no final decisions will be made on allocation of proposed Council funding.

QUESTION:

Provide for the record as well what the specific contribution was to each Regional Fishery Management Council and what other resources are generated from other sources to fund these councils?

ANSWER:

Part 1

Council	Estimated FY 1986 Funding ($K)
New England	$950
Mid-Atlantic	800
South Atlantic	820
Caribbean	585
Gulf of Mexico	870
Pacific	1075
Western Pacific	690
North Pacific	1105
G-R-H	305
	7200

Part 2

No other sources of funds are provided to the Councils.

QUESTION:

You are requesting a reduction of $2,269,000 related to elimination of the environmental impact analysis and habitat conservation activities. Provide for the record what specific research is being conducted in fiscal year 1986 with these funds and show what research would not be conducted in 1987 as a result of this reduction.

ANSWER:

These funds are being used to review permit requests and assessments of impacts of numerous Federally approved water projects. These are proposed development projects which effect the habitat of marine fish populations with significant commercial and recreational value. These programs also support the planning and regulatory decision process of Federal projects. NOAA annually reviews approximately 8,000 permit applications filed with the Corps of Engineers. During 1985, such applications covered over 40,000 acres of coastal habitats with annual fisheries values estimated in excess of $8 million. The FY 1987 budget provides $3.1 million for these activities and is sufficient to protect fisheries habitat.

The primary responsibility for decisions is with the Corps of Engineers, EPA, Bureau of Reclamation, and other Federal and state agencies. NOAA will maintain some consultative and advisory responsibilities under the Fish and Wildlife Coordination Act, NEPA and the Clean Water Act. Many areas of concern are often within the states' jurisdictions and many environmental matters are more appropriately the states' responsibility. Most coastal states have approved CZM programs that address these issues.

QUESTION:

You are proposing to terminate the Salmon Vessel Buy-Back Program for which $1,250,000 was provided in fiscal year 1986. Please provide for the record a summary of this program, how many vessels were bought or licenses bought with the funds appropriated to date, and what the overall success of this program has been in terms of its program objectives stated in the authorization.

ANSWER:

The objective of this program, authorized by P.L. 95-561, the Salmon Steelhead Conservation and Enhancement Act of 1980, was to reduce the non-treaty fishing fleet by 30% ($37.5M authorized).

There has been approximately a 19 percent reduction in salmon fishing power in the Northwest (552 licenses, and 292 vessel restrictions - 30% of the market purchase value).

Funding History:

1981	$3,768K	($5,000K approp. less $1,232 approved reprogramming)
1982	$2,500K	
1983	$2,500K	
1984	$2,500K	
1985	$2,500K	
1986	$1,250K	
TOTAL	15,018K	

This program is administered by the States of Washington and Oregon with pass-through funds from NOAA and does not directly contribute tho NOAA's mission. Reductions in additional units of fishing effort are rapidly escalating in cost, and continuance of the program is no longer cost-effective.

QUESTION:

You are proposing legislation to transfer funding for the Columbia River Hatcheries to a non-Federal source which involves a budget reduction of $8,254,000. What is the status of this legislation? What is the level of funding provided for the Columbia River Hatcheries in 1986? What is the total level of funding we provided for the Columbia River Hatcheries over the life of the hatcheries? Provide for the record what the total output that has been generated and the total return for the dollars put into these hatcheries.

ANSWER:

a. The draft bill to accomplish the transfer was sent to OMB on February 7, 1986. The bill is pending in OMB. The bill would have Bonneville Power Administration (BPA) assume the funding of the Columbia River hatcheries through its power rate base and would cost each household approximately 50 cents per year.

b. The 1986 Commerce budget included $8,254,000 for operation of the hatchery facilities, and is proposed to be reduced by 4.3% to satisfy the Gramm-Rudman-Hollings Budget Reduction Act.

c. Total operation and maintenance funding from 1949 through 1985 was $119,827,000. This does not include construction costs of $30,346,264 and pollution abatement costs of $6,083,400.

d. Total production (numbers of smolts released) is 3,034,611,000 fish. The total estimate value of adults caught is $379,540,000.

QUESTION:

State and Industry Assistance Programs

You are proposing that the grants to states under the Commercial Fisheries Research and Development Act be reduced by $4,250,000. Would you provide for the record what you feel we are getting for the Federal dollar out of this contribution.

ANSWER:

This program, authorized under Public Law 88-309, supports cost sharing activities with the fishery management agencies of the fifty states as well as U.S. Territories and possessions. Over the past twenty years, Federal funds in the amount of $97,132,000 have been used to establish fisheries, develop and enhance commercial fishery and distribution opportunities, conduct research and management activities on both major and minor resources, and collect and analyze fisheries dependent and independent information to support management. Since this program provides funding to other than coastal states, the activities supported are not related to NOAA's mission.

QUESTION:

You are proposing reductions for Anadromous Fisheries of $932,000 and striped bass research at $500,000. Please provide for the record what these activities accomplished in fiscal years 1985 and are expected in 1986 and as a result what would not be accomplished in 1987 as a result of the termination.

ANSWER:

In 1984, a total of 49 cost-sharing (state-Federal) projects were conducted with $3.2 million in Federal funds. Again, in 1985, a total of 49 projects were undertaken with a $3.5 million Federal budget. Attached is the latest published annual report for grant in aid programs (1984) which discusses the anadromous fisheries program in detail. The 1985 annual report will be printed in about six weeks. The striped bass portion (Section 7 of P.L. 96-118) has been funded at $500K for the past two years and has supported state and Federal projects to determine the cause or causes of the decline in striped bass stocks in the Northwest Atlantic. A reduction of $500K for striped bass would terminate the Emergency Striped Bass Research Study. A reduction of $932K in Section 4 funds would decrease by one third the state projects. Most of the projects funded by these fisheries grant-in-aid programs support resource development activities that are more appropriately funded by the State and industry which are the principal beneficiaries.

QUESTION:

Fisheries Market Development activities are proposed for elimination at a cost of $3 million for fiscal year 1987. Please provide for the record what these activities accomplished in 1986 and 1985 with these funds and what the return was for the Federal dollar invested.

ANSWER:

The Fisheries Development, Research and Services funds of the NMFS budget have been used in connection with a number of activities aimed at improving the productivity and competitiveness of the U.S. fishing industry.

NMFS undertakes these activities through its Washington Office, as well as through a series of regional and local offices throughout the country designed to provide services directly to firms in the fishing industry. The following highlights the major activity areas and accomplishments.

Saltonstall-Kennedy Grants Program

In FY 1985 and FY 1986, $8 million was available each year for research and development grants to assist the U.S. fishing industry in carrying out its role in fisheries development.

In addition to administering the grants program, assistance has been provided in organizing and staffing domestic and foreign trade shows, preparing marketing and other consumer education materials, and organizing and running symposia on health-related issues of seafood.

Trade Policy and Analysis

NMFS has undertaken activities to assure that the fishing industry's concerns are addressed in the deliberations and activities of the government's trade agencies. The activities also support the purposes of the American Fisheries Promotion Act by conducting bilateral and multilateral trade negotiations to achieve a fair trade framework for U.S. industry. In this regard NMFS has:

o Represented U.S. fisheries positions in international meetings;

o Advised U.S. Customs concerning development of improved tariff classifications;

o Developed extensive analyses of fisheries trade relations/issues for use by NMFS, ITA and the U.S. Trade Representative with Japan, Korea, the European Community, Taiwan, Canada and Mexico;

o Assisted in preparation for and conduct of fisheries trade discussions with Japan, Korea, Portugal;

o Advised other Federal agencies concerning the status and positions of the U.S. fishing industry in trade actions relating to tuna, Atlantic groundfish and shrimp, and regarding development of U.S. positions at GATT;

- Conducted briefings for U.S. fishing industry and Congressional staffs on procedures and issues relevant to U.S. trade policy as it affects fisheries; and

- Provided input to the NMFS Foreign Allocation; Board relative to trade isssues involved with GIFA countries.

Government Purchases

NMFS arranged for increasing purchases of seafood products by the U.S. government, including USDA Surplus Removals Program, DOD, and programs of the Commodity Credit Corporation. USDA purchases, for example, have grown from $1 million to more than $12 million annually. These activities have been aimed at portions of the fishing industry that are facing extremely difficult economic circumstances, such as tuna, pink salmon, Alaska pollock, and mackerel.

Marketing Services

Although this program area is currently being deemphasized, NMFS is still able to respond to numerous requests for assistance from firms engaged in or seeking to enter various sectors of the fishing industry. For example:

- NMFS has worked closely with Saltonstall-Kennedy grantees in carrying out marketing programs, as noted above. In addition to those activities, regional and local offices respond to requests for assistance in identifying markets, developing and obtaining marketing materials, business organization, consumer trends, species availability, and product performance.

- By establishing an NMFS employee as Fisheries Trade Promotion Coordinator in ITA, NMFS has opened other trade analysis and assistance functions to the fishing industry. Export seminars have been conducted, market intelligence information has been gathered, trade missions have been organized, and U.S. exporters have recieved assistance -- all using substantial expertise available both domestically and abroad from U.S. and Foreign Commercial Service officers.

National Shellfish Register

NMFS took on the prime responsibility for gathering data for and editing the 1985 National Shellfish Register. This data classifies shellfish growing waters throughout the country and is used by Federal and state resource planning, conservation and health agencies.

Return on Investment

We are unable to estimate the total direct and indirect benefits derived by industry, regions, and the national economy that are directly linked to the expenditure of the $3 million. One key issue, however, is whether or not these activities are the proper role of the Federal government. The Administration believes that these activities are the proper role of industry, which benefit most directly.

QUESTION:

You are proposing that the product quality and safety programs be reduced by $4,455,000. Please provide for the record where these activities were conducted, at what levels each activity and geographical location were funded, and a summary of the types of activities that would be proposed for reduction in 1987 that were carried out in 1986.

ANSWER:

We are proposing to reduce the product quality, and safety research on fish contaminants at the following locations:

- Headquarters	-$ 561K
- Gloucester, MA (Close lab)	-$1,465K
- Charleston, SC	-$ 775K
- Pasacagoula, MS	-$ 463K
- Kodiak, AK	-$ 123K
- Seattle, WA	-$1,168K
TOTAL	-$4,555K

This reduction will decrease research related to the consumption of fishery products, including those under DOC inspection at NOAA's fisheries laboratories in Pascagoula, MS, and Charleston, SC. It will terminate utilization research at NOAA's laboratories in Gloucester, MA and Seattle, WA. NOAA will continue to provide a research program for high priority seafood product quality and safety issues at our laboratory in Charleston, SC.

QUESTION:

You are proposing to eliminate the $2 million that was provided for Menhaden and Fish Oil Research in 1986. What are the anticipated results of these funding activities in 1986? Is there potential for further return should this be continued in 1987.

ANSWER:

In 1986, the results of these activities are expected to be as follows:

Menhaden/Surimi Processing Demonstration Project:

- Completion of construction of menhaden-surimi processing demonstration facility at Reedville, VA.
- Initiation of economic analysis and consumer acceptance assessments on surimi processing and products.

Fish Oil Research on Health Effects:

- Completion of design and construction of test materials processing and production facility at NMFS's Charleston Laboratory.

- Completion of ordering, delivery, installation, and testing of all processing equipment.
- Completion of establishing of NIH-certified quality control system for test material production.
- Acquisition of first production/test lot of 75% pure omega-3 fatty acids for NIH grantees.
- Provision of concentrated fish oils to NOAA's Seattle fisheries laboratory for supercritical CO2 fractionation research.

Potential for Further Return in 1987:

Although the execution phase of the menhaden/surimi project will continue into 1987, no additional funding is required to complete this project.

NOAA will work with industry to provide NIH-supported researchers with the quality-verified test materials necessary to determine the health effects of omega-3 fatty acids which are found only in fish oil.

QUESTION:

Where are the funds coming from to close out financial assistance programs that will transferred to the grants and loan administration of $656,000. What are the resources associated with this reduction associated with in terms of operating programs?

ANSWER:

The funds ($656,000) to close out the financial assistance programs are from the monies currently used for administering the financial services programs within NMFS. They are primarily the salaries for 16 positions, 75 percent of which are located at Washington headquarters Office of the National Marine Fisheries Service.

QUESTION:

Public Warning and Forecast Services

You are proposing an increase for the Advanced Weather Interactive Processing System of $5,680,000. What are the overall costs of this program projected to be through its completion?

ANSWER:

The estimated cost of the AWIPS-90 program through full, nationwide implementation in 1995 is projected to be $350 million (1985 dollars). This includes program management, development, production, installation, initial system support, and facilities preparation.

QUESTION:

What components will the $5,680,000 in 1987 fund?

ANSWER:

The budget increase requested for AWIPS in 1987 will permit the NWS to : 1) award the competitive system design contracts that are the heart of the program definition phase; 2) complete the development and deployment of the front-end communications processors at forecast offices and begin the communications transition from AFOS to the AWIPS era; and 3) continue applications development, testing and risk reduction activities needed in advance of the operational implementation of AWIPS in 1991.

QUESTION:

Is there a possibility of accelerating this program through reprogramming of funds in fiscal year 1986?

ANSWER:

No, it is too late in the fiscal year to accelerate the program time table through the reprogramming of funds.

QUESTION:

What are the advantages expected to be as a result of the installation of this system?

ANSWER:

AWIPS represents an automated weather information processing and display system. It is the essential integrating component of the restructured National Weather Service that will support the nation's needs for weather information through the latter part of the 1990's as well into the next century. Specifically, AWIPS will replace AFOS and provide modern data ingest, storage, manipulation, analytical processing, interactive color display, and product preparation and dissemination support to meteorologists and hydrologists. These capabilities will enhance the productivity of the field forecasters and improve their ability to analyze, predict, detect, and monitor local phenomena such as severe thunderstorms, heavy precipitation, tornadoes, high winds, hail, etc., and thereby will contribute greatly to the protection of life and property.

QUESTION:

You are proposing an increase of $4,640,000 for the Automated Surface Observing System (ASOS). What are the program objectives of this system?

ANSWER:

The objective of the Automated Surface Observing System (ASOS) is to improve agency operations and productivity by decreasing or eliminating altogether the time spent by employees in taking weather observations.

In addition, the systems will provide improved observations by operating around the clock with a minute-by-minute weather watch and rapid alert for significant weather changes. ASOS will also produce better observations at night and more standardized measurements of sky condition and visibility.

These improvements in productivity and observation quality carry over into the interagency arena as well, since the NWS is collaborating with the Federal Aviation Administration and the Department of Defense in a Joint Automated Weather Observing Program (JAWOP). These other agencies also conduct extensive surface observing programs to support weather forecasting and aviation and military operations. Under the JAWOP, the three agencies seek common solutions and cost effective approaches to implementing surface observing technology.

QUESTION:

What are the total costs expected to be for the ASOS Program?

ANSWER:

Total ASOS Program costs, from inception in FY 1981 through completion in FY 1992, are projected to be $76M.

QUESTION:

How quickly do you think you will be able to implement the full program components of the ASOS Program?

ANSWER:

By the end of FY 1992, all ASOS systems will be installed and operating at NWS field offices across the country. Currently, preparation of the production system specification is underway, with a contract for design, fabrication and testing scheduled to begin in FY 1987. Production go-ahead is planned for late FY 1988. Full-scale production and deployment will be carried out over the next four years, culminating in program completion late in FY 1992.

QUESTION:

What are the outyear costs for the ASOS Program?

ANSWER:

Outyear costs for the ASOS Program are:

(in thousands of dollars)

FY 88	FY 89	FY 90	FY 91	FY 92
9,450	11,250	13,350	15,200	4,000

QUESTION:

You are again proposing to reduce staff at eight Weather Service Forecast Offices saving $836,000, consolidate the four region management structure into three regions, and close the southern regional headquarters in Dallas, Fort Worth for a savings of $852,000 and combine managerial functions of the Pacific Region headquarters and Alaska Region headquarters offices saving $407,000. Do you feel that the disruption caused by these proposals is really worth the savings generated in terms of the overall cost of the Weather Service programs?

ANSWER:

The changes being proposed produce significant savings and will not disrupt weather service programs.

QUESTION:

You are proposing to reduce funding for the Micronesia Weather Service by $456,000 because it will be funded by the Department of the Interior. Will there be an elimination of services?

ANSWER:

An arrangement has been developed to handle the complex multi-agency funding associated with administering the Compact of Free Association from a single, centralized point -- the Department of the Interior. There will not be any services eliminated. The Compact stipulates that the existing level of services continue for fifteen years.

QUESTION:

You are proposing to reduce funding for Data Buoy Center System and Test Capability by $1,174,000. Please provide for the record what activities were conducted in fiscal year 1986 with these funds that will not be conducted in 1987.

ANSWER:

Of the $1,174,000 available in 1986, $600,000 was appropriated and is being used for operating and maintaining the 4 NOMAD data buoy stations 200-300 miles off the Hawaiian Islands. The remaining $574,000 of FY 1986 funds was appropriated for engineering development and operational testing of new data buoy systems. In addition to operational testing, engineering projects are conducted to improve the existng and future data buoy systems. These project which will be discontinued in FY 1987, do not affect the operation of the existing buoy network.

QUESTION:

You are proposing to eliminate non-Federal Fire Weather Services of $300,000 for fiscal year 1987. Please provide for the record the locations of where these Fire Weather Services are located and what areas would not be served as a result of the reduction proposed.

ANSWER:

The FY 87 budget proposes to maintain weather services that support Federal and non-Federal wildfire activities, while eliminating services to non-Federal agencies that support their non-wildfire activities (e.g., prescribed burning, smoke management, insect spraying, reforestation). The proposal pertains to non-wildfire services provided to non-Federal agencies, by the following National Weather Service Offices:

> Anchorage, AK; Fairbanks, AK; Birmingham, AL; Little Rock, AR; Phoenix, AZ; Eureka, CA; Fresno, CA; Redding, CA; Riverside, CA; Sacramento, CA; Denver, CO; Washington, DC; Tampa Bay, FL;
> Atlanta, GA; Macon, GA; Honolulu, HI; Boise, ID; Chicago, IL; Topeka, KS; Louisville, KY; New Orleans, LA; Boston, MA;
> Ann Arbor, MI; Minneapolis, MN; St. Louis, MO; Jackson, MS; Billings, MT; Missoula, MT; Raleigh, NC; Bismarck, ND; Omaha, NE; Albuquerque, NM; Reno, NV; Albany, NY; Oklahoma City, OK;
> Medford, OR; Pendleton, OR: Salem, OR; Philadelphia, PA;
> Columbia, SC; Memphis, TN; Brownsville, TX; Fort Worth, TX;
> Lubbock, TX; San Antonio, TX; Salt Lake City, UT; Olympia, WA; Wenatchee, WA; Milwaukee, WS; Charleston, WV; and Cheyenne, WY.

Because some of those offices serve multiple states, the following states would not be served as a result of this reduction (in addition to those states listed above):

> Connecticut, Delaware, Indiana, Maine, New Hampshire, New Jersey, Ohio, South Dakota, Vermont, and Virginia.

The discontinued fire weather advisories are available to states and localities from private meteorological firms.

QUESTION:

You are proposing to eliminate the Meteorological Technician staffing of $576,000. Where do these positions reside currently and what will not be provided in 1987 as a result of this reduction?

ANSWER:

These positions are located at:

Weather Service Office, Oakland, CA
Weather Service Office, Bridgeport, CT
Weather Service Forecast Office, Miami, Fl
Weather Service Office, Springfield, IL
Weather Service Office, Waterloo, IA
Weather Service Office, Baltimore, MD
National Meteorological Center, Camp Springs, MD
Weather Service Office, Havre, MT
Weather Service Office, Lincoln, NE
Weather Service Forecast Office, Albuquerque, NM
Weather Service Office, Burns, OR
Weather Service Office, Charleston, SC
Weather Service Office, Nashville, TN
Weather Service Office, Amarillo, TX

No specific services will be eliminated or reduced, and the provision of essential warning and forecast services will not be affected by this reduction. The 16 meteorological technician positions represent approximately 1% of the total meteorological technician staffing at the National Weather Service.

QUESTION:

You are proposing to eliminate the $400,000 related to emergency power at WSFOs with weather radio broadcast responsibility. Please provide for the record what was conducted with these funds for fiscal year 1986? Are there additional needs related to this activity that could be funded with these funds in fiscal year 1987? Are there other locations where emergency power could be funded?

ANSWER:

The NWS is replacing four emergency power plants in fiscal year 1986 and recently completed a fiscal 1985 funded installation of a new emergency power plant at WSO Aberdeen, SD. Replacement units will be installed at WSMO Centreville, AL; WSO Jacksonville, FL; WSMO Waycross, GA; and WSO Austin, TX.

The NWS has emergency power service at 85 percent of the 213 offices (WSOs and ASFOs) with NOAA Weather Radio (NWR) broadcast responsibility. Of the 350 NWR remote transmitters, 40 percent or 141 sites have emergency power service. NWS is focusing resources on major modernization programs that will benefit the nation.

QUESTION:

You are proposing to eliminate the Agricultural Weather and Fruit Frost programs totalling $1,418,000 in 1987. Cite for the record where you think the specific private industries would be providing this information. Please provide for the record the 1985 and 1986 experiences with this program in which fruit frost advisories were able to save significant levels of crops from being damaged as a result of early warning in freezes in Florida.

ANSWER:

Many private firms are providing meteorological services in most areas of the country today. Normal economic motivations will result in these firms assuming, quite vigorously, the agricultural weather and fruit frost services. Agricultural weather forecasts, advisories, and fruit frost forecasts and freeze warnings that could potentially have been provided by the private sector, were helpful in five instances in 1985 and 1986. The freeze of January 21-23, 1985, was well forecast. However, the intensity of the freeze was such that farmers could take very little action to overcome effects such as the killing of citrus trees. Moderate freezes on December 26 and 27, 1985, and on January 27 and 28, and March 2 of this year were all preceded by freeze forecasts some 4 to 5 days in advance. In this case, farmers were able to take actions to prevent major damage. On March 23 and 24, a well-forecast freeze still caused major damage to vulnerable, spring-planted row crops, due to the farmers inability to take a sufficient level of protective action. Private meteorological firms can provide forecasts of freezes and temperature advisories, and may also provide more detailed client-specific services not provided by NWS.

QUESTION:

You are proposing to eliminate the maintenance and system upgrade for the Colorado and Susquehanna River Basins and flood warning of $2,990. Are these system upgrades complete? What maintenance costs are related to these two systems? What is the total cost of the completion of these two systems expected to be? What are the maintenance levels required for these two systems.

ANSWER:

In FY 84 Congress appropriated a one-time $1 million supplemental to begin the Colorado River network enhancement, and in FY 85 added $1.7 million to complete the siting, purchase, and installation of the hydrological data system. In FY 86, $650,000 was added to cover the annual recurring costs of operational support and maintenance of the Colorado River Basin flood-warning system. The Colorado Basin enhancements are nearing completion.

The enhancements for the Susquehanna River Basin flood-warning system were funded for $2.34 million in FY 86 to upgrade and modernize the system; plans are now being developed for these upgrades. The $2.34 million will complete a flood warning system for the Susquehanna Basin. The maintenance level for the Susquehanna for FY 88 is estimated to be $950,000, making a combined recurring cost of $1,600,000 for the Colorado and Susquehanna River Basin systems.

QUESTION:

Atmospheric and Hydrological Research

You are proposing an additional $1 million for hurricane prediction research. Please provide for the record what your base level of research is for this activity, and what you anticipate achieving with the additional $1 million. Is $1 million enough for this increased research? What would be the total universe of needs to be funded for hurricane research, and how could you effectively spread that out over a 5-year period for a comprehensive program? Provide for the record the annual funding levels associated with the 5-year program for a system and comprehensive hurricane prediction research effort.

ANSWER:

The base level for hurricane research is about $2.1M per year.

With a $1M/year increase level over 5 years, NOAA can capitalize on recent and planned scientific and technical advances to improve hurricane prediction:

- o Better understanding of hurricane dynamics and processes will be achieved through analysis and synthesis of data collected during the 1985 and future hurricane seasons. The 1985 hurricane season was the most active in decades, with eight storms making U. S. landfall. Analysis of this large backlog of data will add valuable insights to the workings and movements of hurricanes.
- o New and better hurricane tracking and intensity prediction techniques will be developed by applying new types of in-storm data to tracking and intensity forecast problems.
  - A new land based radar data acquisition system has been operationally tested during the January-February 1986 GALE (Genesis of Atlantic Lows Experiment). The new system will be installed during the 1986 hurricane season to provide more detailed and accurate data than heretofore available;
  - Doppler radar systems will be added to both NOAA WP-3D hurricane hunter aircraft during 1988. At present, only one aircraft is equipped with a hand-made Doppler radar designed several years ago. The new commercially built radars will include a microcomputer data acquisition system to record and transmit data in real-time to National Hurricane Center forecasters and NOAA researchers;
  - A real time data relay system from the aircraft to the National Hurricane Center and to researchers will become available in 1987. More timely ground processing of data from omegadropwindsondes, drifting buoys, expendable ocean current profilers, and the usual aircraft data (wind,

temperature, etc.) will improve quality control and promote more rapid use of the data in research and operations;

- A second generation numerical hurricane prediction model will be developed to forecast hurricane intensity and track. The model will be designed to use the new, more dense radar, dropwindsonde, and drifting buoy data now being gathered experimentally. The model will include improved physical relationships developed and being developed by NOAA-Hurricane Research Division and Geophysical Fluid Dynamics Laboratory researchers. The second generation hurricane prediction model should be ready to operate in a research environment in late FY1991.

A $1M per year increase in Hurricane Research funding will support the above tasks within a five-year timeframe.

QUESTION:

You are proposing an increase of $500,000 related to Remote Sensing Instrumentation for thermodynamic systems. Provide for the record what other types of research are being conducted elsewhere that would complement this research.

ANSWER:

These funds will be used to accelerate R&D on the ground-based, microwave, radiometric system for the continuous, automatic, profiling of temperature and water vapor. This program is designed to complement NOAA's operational polar and geostationary satellite sounding systems by providing accurate information on temperature and water vapor profiles in the lowest few kilometers of the atmosphere--a region not well measured by the satellite sounding systems, especially over land. It also complements NOAA's research on ground-based remote profiling of winds, now reaching the pilot demonstration phase with the scheduled deployment of 30 automatic wind profiling radars in the central United States in FY 1988 and FY 1989.

Other related research includes the use of this ground-based water vapor/liquid water measuring capability to increase the accuracy of the Global Positioning System (GPS) satellites, and for research on clouds and weather modification.

The use of lasers as an alternative method of profiling temperature and humidity has been studied for many years, primarily by NASA. These optical systems cannot operate successfully through clouds, fog, or precipitation, and therefore cannot (unlike the NOAA microwave radiometric system) meet NOAA's needs for an essentially all-weather profiling system.

QUESTION:

Is $500,000 a realistic level to accomplish any meaningful results?

ANSWER:

Yes. The $500,000 level per year will permit a focused research and evaluation program directed toward further improving the height resolution of the derived temperature and humidity profiles and to evaluate this new real time system as a replacement (when combined with the wind profiler) for the current labor intensive, upper-air system, the radiosonde.

QUESTION:

What would not be accomplished if this were not provided?

ANSWER:

It is important to understand that NOAA's Profiler system is a breakthrough of first magnitude. Currently, U.S. weather research and services are constrained and restricted by upper air data sets produced primarily by a technology--the radiosonde--introduced almost 50 years ago. The NOAA ground-based Profiler system offers promise of providing (in combination with scheduled satellite sounding systems), automatically and continuously, up to a 1000-fold increase in the space/time density of upper air wind, temperature, and humidity profiles, with an accuracy and height resolution matched to the needs of modern weather forecasting methods.

Without these funds, attainment of an ability to measure profiles of temperature and humidity, automatically and continuously, will be delayed and the opportunity to install the temperature/humidity profiler along with the wind profiler in the 1990's will be lost. NOAA's short-term (0-48 hours) weather research and services would therefore continue to be limited to approximately their present capability, and major opportunities for increased efficiency of national industries such as aviation, agriculture, construction, and energy production would be lost.

QUESTION:

You are requesting an increase of $1 million for the monitoring of and research on radiatively important trace species. (a) Please provide for the record the history of funding in NOAA for this program. (b) What other research efforts are ongoing that you know of in this area. (c) Please provide for the record what you anticipate to achieve as a result of this $1 million investment. (d) What are the outyear costs related to this research effort?

ANSWER:

(a) The funding history of NOAA's Radiatively Important Trace Species Program is as follows:

FY 85	$1,300,000	Congressional appropriation
FY 86	$1,500,000	Requested by the Administration and approved by Congress
FY 87	$2,500,000	Requested by the Administration

(b) Monitoring

- o Australia monitors some RITS gases at one site in the Southern Hemisphere. NOAA collaborates with Australia through joint measurement programs and exchange of scientists.

- o Some universities conduct regular measurements of some RITS gases at four sites in the Northern Hemisphere. NOAA provides funds for one of these sites under the RITS program and is intercalibrated with all four.

- o Scripps Oceanographic Institution monitors nitrous oxide concentrations along ocean tracks; no other RITS gases are included. NOAA proposes to include all important molecules of RITS at its baseline observatories. However, since Scripps is part of NOAA's carbon dioxide program, there will be ample mechanisms for coordinating between the two programs.

- o NASA has one ozone monitoring site, and some European and Asian countries make ozone soundings on a regular basis. However, their emphasis is on stratospheric ozone. There is no existing tropospheric ozone emphasis, as is required by RITS. The NOAA proposal in this regard is the only one being discussed among scientists worldwide. NOAA now coordinates the total-column ozone measurements throughout the world for the World Meteorological Organization; therefore we have the opportunity and experience to coordinate the tropospheric monitoring network.

Chemistry

- o Germany has a new program to quantify ozone production in high auto hydrocarbon regions. Since European cars are "unscrubbed" (i.e., no catalytic convertors), this source of ozone is stronger there than it is in the United States. To assure that both NOAA's RITS chemistry and the complementary work in Germany can better aid understanding the global problem, a NOAA scientist will spend the summer of 1986 in the German laboratory.

- o NASA is sponsoring research aimed at understanding the biochemical processes that release methane. This work could lead to an ability to predict future methane emissions, once the major sources are identified. NOAA's twenty-plus monitoring sites are providing the patterns that suggest initial distributions of source areas.

- o Scripps and Woods Hole Institutions both carry out expeditionary measurements on processes that are related to RITS. However, these are basically oceanic-oriented studies; NOAA's proposed RITS program expects to utilize NOAA's ocean laboratories to examine the role of oceans in controlling the distribution of RITS totally. Thus, there is a great potential to examine the RITS issue from both the atmospheric and oceanic viewpoints.

- o NSF, DOD, NASA, EPA, and other agencies sponsor aerosol research. The RITS focus, however, is on carbonaceous aerosols and their climatic impact. An international network of sampling sites exists across the Arctic Basin. The NOAA baseline site at Barrow, Alaska, is part of this network; thus, the mechanism for coordination already exists.

- o NASA and NSF conduct expeditionary measurements of tropospheric photochemistry. The emphasis of NASA's research is on the tropospheric source of gases that eventually reach the stratosphere. NSF emphasizes biological and cloud processes. NOAA will focus on monitoring, measurements, and modeling of the radiatively important species in the troposphere, a focus that no other agency or group has. NAAA scientists are principal investigators on many joint NOAA/NASA programs, as well as members of joint scientific planning groups. Thus, ample opportunity exists to coordinate the related NOAA, NASA, and NSF programs.

Theoretical Modeling

- o NASA and NCAR have developed theoretical models that are currently being used for some RITS-type climate analyses. However, they do not take into account the role of the oceans as source or sink for the species or the chemistry included in the RITS program. NOAA's program proposes to account for air-sea interactions in determining the concentrations of RITS in the atmosphere. Furthermore, NOAA has the background in chemistry and dynamics, both of which are critical for the RITS program. Existing collaborative projects between NOAA, NCAR, and NASA assure the means for coordinated programs.

(c) The proposed FY 1987 funding level will permit the following activities:

- o Two sites will be established to provide the first long-term measurements of tropospheric ozone. This RITS trace gas is currently suspected to be increasing in the Northern Hemisphere as a result of the global spread of some pollutants. The RITS ozone measurements will determine the trend, and the continental and oceanic sites will be able to yield data about whether pollution or natural variations is responsible. These data will provide the first look at the global patterns of this species that is generally held to be the most important one in the troposphere.

- The regular shipboard measurements along oceanic tracks will link the fixed baseline observatories by showing how the RITS components vary between the fixed sites. These latitudinal variations will determine how rapidly gases released in one hemisphere are transported to the other. These are the timescales that define how regional problems become global problems.

- The key to chemistry that forms and destroys RITS components is the highly reactive species called radicals. The new research will address their measurement, which will require the development of new instrumentation. With such capabilities, the steps of the chemistry can be defined and incorporated into a theoretical framework of the RITS phenomenon.

- The NOAA general circulation models will be refined to include chemical processes. Model predictions can then be tested against observed RITS trends, distributions, and chemistry. Iterative improvements over the next several years will yield the first substantially complete assessments of the potential chemical and climatic consequences of the RITS trends.

(d) The proposed FY 1987 program assumes level funding in the outyears.

QUESTION:

(a) You are proposing to decrease by $2 million the program for regional observing and forecast services. What will be eliminated as a result of this reduction? (b) What will you have accomplished in 1986 with this $2 million? (c) Do you feel that you can forego the same type of results in fiscal year 1987 as a result of this reduction?

ANSWER:

(a) The proposed reduction relates to a decrease of in-house funded applications research using the PROFS facility. The PROFS mission in demonstrating techniques to integrate diverse data sets has largely been accomplished as evidenced by the initiation of the AWIPS program. The remaining base of $2,000,000 will maintain the PROFS facility and support to the National Weather Service for implementation of the Advanced Weather Interactive Processing System (AWIPS). Other (e.g., non-NOAA) researchers will be able to use the facility for applications research on a reimbursable basis.

(b) At the end of 1986, NOAA will have in place through the PROFS Program:

- a demonstration functional prototype of an AWIPS-type system at the Denver National Weather Service Forecast Office. Named DAR3E (Denver AWIPS Risk Reduction and Requirements Evaluation), this first and very basic system is a major element of the NWS program to evaluate AWIPS requirements and to minimize the risk of designing and implementing the new system;
- a basic capability Mesoscale Analysis and Prediction system which will be capable of collecting and processing experimental data from remote wind and thermodynamic profilers, satellite sounders, and automated aircraft reports into a form useable by mesoscale numerical prediction models;
- a research workstation to support severe thunderstorm and tornado prediction development at the National Severe Storms Laboratory in Norman, Oklahoma.

(c) Yes. The PROFS mission in demonstrating techniques to integrate diverse data sets has been accomplished as evidenced by the initiation of the AWIPS program.

QUESTION:

You are proposing to reduce Meteorological and Hydrological research by $340,000. What does this leave in your base for this type of research? What could be accomplished with this additional resources in 1987 if it were provided? What did you do with the additional resources in 1986?

ANSWER:

In FY 1986 this $340,000 was used for contract software support for the River Forecast System, operating the Snow Research Laboratory, and solar radiation research. These projects are related to NOAA's mission but not essential to it. To focus resources on high-priority new programs, such as Profiler, NOAA is requesting that less criticial efforts such as these be terminated. Reducing Meteorological and Hydrological research by $340,000 would leave $2,539,000 in the National Weather Service base for this type of research.

QUESTION: 870108

You are proposing to reduce the Global Atmospheric Research program associated with the TOGA program by $1 million. What is this research reduction related to? What was accomplished in 1986 with these funds?

ANSWER:

The proposed $1 million reduction in GARP is related to NOAA support for the TOGA program. In FY 86 these funds, by congressional direction, were applied to support the core research activity aimed at prediction of ENSO events. Specifically, the FY 86 funds were obligated for support of the large-scale observational component of TOGA in the Indo-Pacific region. Most of the planned observing systems for ENSO will be in place by the end of 1986. The proposed reduction will not have an impact on the long-term goals of TOGA because of cooperative agreements being develop with other nations who will supplement this research effort. NOAA will continue to work with other agencies and nations to ensure that program objectives are met.

QUESTION:

You are proposing to reduce by $800,000 the Western Regional Climate Forecast Center. What was accomplished in 1986 with these funds? What do you anticipate the effect of the reduction will be in fiscal year 1987?

ANSWER:

In FY 1986, the Climate Program anticipates spending approximately $374,000 to initiate the Western Regional Climate Center. This includes the draft planning proposal currently under peer review by university scientists. The start-up plan is an eight month strategy which includes planning with states and institutions, purchasing and installing computer upgrades, defining network systems for communication, and identifying private , state and local users.

The remainder of the funds will be spent on a climatogist network and a research plan on desert climate research themes which will lapse into the first quarter of FY 1987. Funds will not be available to operate the center effective mid-year.

QUESTION:

You are proposing to reduce the Space Environment Lab funding by $300,000 for fiscal year 1987. what did these funds carry out in 1986? What will not be accomplished in 1987 as a result of this reduction?

ANSWER:

The research in the Space Environment Laboratory is directed toward the improvement of Solar-Terrestrial Services provided by NOAA. This research on solar-terrestrial forecasting techniques, instrumentation, and data storage involves the interpretation of data from new and proposed real-time space monitors; maintenance of professional liaison with other scientists in the solar-terrestrial field; and the development of new forecasting techniques.

In order to focus resources on the highest priority research programs, NOAA can achieve savings in this area by reducing less critical efforts such as research aimed at long-term improvements in solar forecasting (e.g., interplanetary physics).

QUESTION:

Satellite Services

You are proposing to establish a Mission Control/Data Distribution Center for search and rescue operations totalling $3,775,000. What are the total costs associated with this program? What are the outyear costs related to this program? Are any other agencies contributing to this effort? Is this a reciprocal arrangement with other governments? What other governments are involved?

ANSWER:

The total cost to develop and establish the U.S. Mission Control Center for processing and disseminating distress data received from the COSPAS/SARSAT system is $3,775,000 in FY 87 and $2,450,000 in FY 88. The outyear operational costs are $1,855,000 per year starting in FY 89.

The ground system for the COSPAS/SARSAT system is made up of Mission Control Centers (MCC), receiving stations known as Local User Terminals (LUT), and communications links. Within the U.S. there are three LUTs; two operated by the U.S. Coast Guard and one by the U.S. Air Force. The current USMCC which was designed for the demonstration and evaluation of SARSAT is operated by the U.S. Air Force. Internationally, the exchange of distress data is accomplished by reciprocal arrangements. In addition to the U.S., the following nations operate Mission Control Centers: the Soviet Union, France, Canada, the United Kingdom, and Norway. Brazil will be establishing a Mission Control Center in early FY 87.

QUESTION:

You are proposing a reduction of $1,400,000 related to Landsat operations. Why are you not requesting any contributions for EOSAT activities which is the commercialization of the Landsat system?

ANSWER:

The Administration proposes to discontinue subsidies for Landsat and to transfer full responsibility for this program to the private sector because Landsat principally benefits special interests (e.g., oil companies) and should be funded by those interests rather than by the Government.

QUESTION:

Please discuss what the new proposal related to EOSAT and continued Federal funding is. What are the potential drawbacks to your plan?

ANSWER:

We are not at liberty to discuss proposals pending review within the Administration.

QUESTION:

Do you feel you can adequately carry out your mission and statutory responsibilities with such a plan?

ANSWER:

We are not at liberty to discuss proposals pending review within the Administration.

QUESTION:

Satellite Systems

You are proposing a reduction of $25,453,000 related to normal cost fluctuations in the multiyear procurement and lot schedules. Could further reductions be taken beyond this $25 million level?

ANSWER:

The reduction of $25,453,000 in the Geostationary program results from the scheduled completion of the GOES G&H program when both of these satellites are launched in FY 86 (-$43,403,000), and the continuation of the GOES I through M program (+$17,950,000) that started in FY 85. The FY 87 request ($118,530,000) used the latest NASA estimates of contractor accrued costs in FY 87 based on the negotiated GOES I-M contract.

Based on latest NASA estimates received from NASA, no further reductions can be made without modifying the GOES I through M contract.

QUESTION:

You cite other decreases associated with the scheduled completion of modification to GOES ground systems of $1,461,000. Are there projected increases for the ground systems based on new technology projected for the next three to five years?

ANSWER:

Yes. The FY 87 budget request includes increases for ground system improvements and replacements based on new technology projected for the next three to five years. This is especially true for the GOES ground system, as it must operate with the new technology of the Ford spacecraft (GOES I-M) and sensors in late 1989.

QUESTION:

The $17,150,000 increase request you have related to ground system improvements for the next Polar and GOES series is irrespective of the number of polar-orbiting satellites. Is that correct?

ANSWER:

Yes and no. Since the two polar spacecraft operated today are separated by about six hours, the ground system operates and controls only one satellite at a time. The same ground system resources are needed to operate one or two polar satellites of the current inventory under the assumptions used in the FY 87 budget request. GOES ground system requirements are independent of polar ground system improvements.

However, the timing of the ground system improvements required for the NOAA K,L,M series depends on whether NOAA flies a one- or two-polar system, because the launch date for the first spacecraft in the new series (NOAA K) is earlier in a two-polar system. The ground system improvements must be in place by the launch of NOAA-K, so procurement must begin earlier in a two-polar configuration.

QUESTION:

Does the maintenance of a two polar orbiting satellite system have any bearing upon the cost of the ground system improvements?

ANSWER:

The same ground system upgrading and replacement must be accomplished whether we have a one or a two polar orbiting system. However, under a two spacecraft program the replacement ground system must be in place approximately one year earlier than for a one polar system. The total cost of the NOAA K,L,M ground system improvements will be higher under a one polar configuration because of inflation.

QUESTION:

You are proposing a one satellite polar orbiting system at a reduction of $62,226,000. What are the costs associated in fiscal year 1987 and cite for the record those associated in the outyears for the maintenance for a two polar orbiting satellite system.

ANSWER

Since the ground system costs vary according to the spacecraft configuration, they are inlcuded in comparisons between one vs. two-polar costs (the $62,226,000 reduction doesn't inlcude ground system requirements). The assumptions used for the FY 87 budget submission estimated the budget increase for maintenance of a two polar orbiting system including ground system, as follows:

(dollars in thousands)

87	88	89	90	91
80,080	133,370	136,550	134,000	168,830

QUESTION:

Funding for a two polar system has been provided through what year?

ANSWER:

The two polar system has been funded through FY 86.

QUESTION:

Have you considered using the Navy's N-ROSS bus as a platform for your polar-orbiting satellite system sensors?

ANSWER:

No. We understand the N-ROSS bus is undefined, so we don't know if it should be considered or not.

QUESTION:

What is the possibility of using the Defense meteorological satellite as a bus for the sensors related to the polar-orbiting satellite system? Are you aware of the GAO report that is about to be issued relating to this approach? Do you realize that government savings could be generated of $35 to $40 million a year as a result of this type of procurement?

ANSWER:

The current DMSP bus is too small to accommodate NOAA's present sensor payload. We have heard informally that GAO is preparing a report on polar Metsats, but we have not been presented with a copy. We will review the conclusions of the report to evaluate potential savings.

QUESTION:

Executive Direction and Administration

You are proposing a permanent fund for repair of fishery facilities of $1 million to be transferred from the Fisheries Loan Fund. What are the outyear costs associated with this repair fund? What types of repairs will be accomplished in 1987? What repairs were affected in fiscal year 1985 and 1986, and where did you achieve the funding for these activities?

ANSWER:

The outyear costs for the facilities fund will be $1,000,000 annually. After FY 87, these funds will be provided through new budget authority of $500,000 each year. The type of repairs include maintenance upgrades for 19 NMFS facilities to bring them up to health code standards. Approximately $200,000 was directed towards these repairs from programmatic funds to address critical insufficiencies and health hazards at key facilities. Once these are addressed, the funds will be directed to the remaining NOAA facilities requiring upgrades.

QUESTION:

Marine Services

You are proposing to obtain fisheries research ship support through charters and also to deactivate several ships and reduce days at seas. All of this totals $10,228,000.

ANSWER:

The reduction proposed for converting to charters for fisheries research is -$4,141,000; for deactivating three other vessels, -$3,350,000; and for days-at-sea, -$812,000. This totals $8,303,000. We are also proposing support savings available because of these ship and days-at-sea reductions; -$800,000 for personnel, -$1,155,000 for fleet maintenance and -$368,000 for fleet rehabilitation. TThe total savings is thus $10,626,000.

QUESTION:

Do you think there is a possibility that you could sell the vessels that you propose to deactivate and achieve some type of receipt that would offset the increased operating costs should we decide to provide more days at sea?

ANSWER:

NOAA has no recent experience in selling vessels but we estimate that at least one year would be required to dispose of the vessels. We do not know what price they might bring or if buyers could be found. We are completing and upgrading a cost comparison of chartering versus NOAA operation to better define the chartering market and determinate the availability of various types of vessels. Until this is completed, NOAA proposes to keep its vessels in reserve rather than sell them. The capital investment to purchase new vessels would be prohibitive so we need to carefully define the charter market and our needs before we consider selling some. Meanwhile, some of the ships would be used when commercial fishing vessels are unavailable or more expensive than using NOAA vessels. Due to heavy demands for vessels during the fishing season, NOAA may be unable to charter some of its fisheries research operations. NOAA will be in a position to determine the proper mix of inhouse vessel operations and chartering once the chartering market place has been defined.

QUESTION:

You are planning to close a secondary support facility for $300,000. Where is this secondary support facility?

ANSWER:

The facility is located in Miami, Florida.

QUESTION:

Which ships are currently serviced by that facility?

ANSWER:

The NOAA Ship RESEARCHER uses the leased Miami facility as a home port. Our current lease expires in FY 87.

QUESTION:

What is the effect of ongoing research in closing this facility?

ANSWER:

The NOAA Ship RESEARCHER's home port would be changed from Miami to NOAA's government-owned Atlantic Marine Center in Norfolk, Virginia. The relocation would save about $300,000 annually after the first year. The first year savings would be offset by the relocation costs. The RESEARCHER would continue to stage for projects in Miami as needed. There should be little effect on ongoing research by closing this facility.

QUESTION:

If the Congress appropriated funds to maintain the same fleet size in 1987 as in 1986, would we also have to increase by $368,000 the adjustment you have made to the ship rehabilitation program?

ANSWER:

The purpose of the fleet rehabilitation program was to extend the operating life of vessels in the NOAA fleet by 10 to 15 years. For an FY 86-size fleet, we could still meet this goal by slightly slowing the program. As we support laying up many of these ships, a slower program would be more prudent in any case, to avoid spending funds on ships which are eventually laid up.

QUESTION:

You are proposing to reduce by $200,000 the funds that were provided for Global positioning systems studies. What did these fund in 1986 and what will not be provided in 1987 as a result of this reduction? Is there a need for these types of activities?

ANSWER:

The Global Positioning Studies were completed in FY 1986. The $200,000 provided for the Global Positioning System (GPS) are being used to test and evaluate equipment at sea, to support operations when such usage is feasible and effective with the limited coverage of Block I satellites, and to develop applications for GPS. These applications will provide enhanced position accuracy required for many of NOAA's charting, mapping, and surveying missions.

QUESTION:

You are requesting again an increase of $1,100,000 related to the acquisition of multibeam bathymetric survey systems for two class one ships. Do you feel that this time is an appropriate one for this type of acquisition?

ANSWER:

This is an appropriate time for acquisition of multibeam systems to map the Exclusive Economic Zone (EEZ). Mapping of the EEZ will assist in development of resources in this territory. EEZ mapping will also allow wise management and protection of the marine environment in this large ocean area.

The systems would be installed on either Class I or Class II ships and would allow NOAA to begin mapping the East and Gulf coasts. The systems will support the cooperative project between NOAA and the U.S. Geological Survey (USGS). The USGS is collecting low resolution, very wide swath survey data using the GLORIA system, and NOAA is collecting more detailed data using multibeam systems.

The proclaimed EEZ established sovereign rights to resources and jurisdiction over an enormous ocean area. Relatively little is known of this new territory, and exploracion and surveying will be necessary in advance of development. Modern multibeam bathymetric survey systems now make this possible. Existing bathymetric map coverage in offshore areas was developed from available trackline surveys. Proceeding seaward, this data becomes sparse, thus significant improvement can be made to bathymetric products.

Bathymetric maps are needed for (1) Ocean Research - to deploy ocean bottom instrumentation, to aid research submarine operations that normally have only limited endurance, to aid deployment and use of remotely piloted vehicles; (2) Environmental Assessment - to aid development of computer models concerning toxic spill/waste dispersal, to evaluate environmental phenomenon, to study the effects of naturally injected elements on the water column; (3) Offshore Development - to aid engineering design to identify hazard areas, to aid site selection to identify cable/pipeline routes; (4) Living Resource Management - to identify new seamounts for fishery development, to aid fishermen using deep trawl or bottom fishing gear, to identify sites for trap/pot deployment, to evaluate spawning areas; (5) Mineral Development - to evaluate geological formations, to assess volumes and economic potential, to provide map location and depth information.

QUESTION:

Is the research ready for this type of equipment?

ANSWER:

Yes, we are ready and capable of producing the maps required for commercial development, wise management, and environmental protection of the EEZ. We presently have several requests for site specific data in the EEZ. Data has been requested for use in research of seismic activity in the offshore extension of earthquake producing fault zones; of benthic communities and formation processes of oil, gas, and minerals in the subduction zone; and of bottom sediment transport.

QUESTION:

Aircraft Services

You are proposing to reduce aircraft maintenance funds by $900,000. What are these reductions related to? Will you still be maintain the same level of aircraft services that you provided in 1986? What is the status of the acquisition of the twin-engine helicopter for which funds were provided in fiscal year 1986?

ANSWER:

FY 1986 Maintenance Reductions

The $900,000 in maintenance funds for FY 1986 will be spent on the following:

1) $720.0K - Unscheduled maintenance including: replenshing the spare parts inventory including funds for such major replacement parts as gear boxes, auxillary power units, engine power plans, and propellors.

2) $180.0K - Instrument maintenance, data systems, and calibration.

The reduction will be spread across the board, and absorbed in the variable cost items, i.e., those items directly proportional to the number of hours flown by the P-3's. Flight hours will be reduced for FY 1987.

Status of Bell Twin Engine Helicopter

NOAA has submitted to the Department of Commerce (and subsequent clearances) in March 1986, a request to reprogram the $2M for the purchase of two used Bell Twin Engine helicopters. This has been cleared by OMB and will be transmitted to the Hill. NOAA can purchase and outfit two fairly new helicopters for the cost of one new one. This will double the available twin-engine flight hours, allowing use of twin-engines for most of our helicopter work over open waters and hazardous areas.

QUESTION:

You are requesting an increase of $1,700,000 to fund 30 percent of a cooperative effort with the Air Force to upgrade hurricane reconnaissance instruments. Are there additional outyear costs related to this acquisition beyond fiscal year 1987? What type of instruments will be purchased? How many planes will be outfitted with these additional instruments? What is the proportion of Air Force versus your 2 P3 plans that fly hurricane reconnaissance missions?

ANSWER:

The cooperative effort with the Air Force to upgrade the hurricane reconnaissance instruments (IWRS) includes the following:

1) NOAA proposes to provide $1,700,000 in FY 1987, $1,700,000 in 1988, and $1,600,000 in FY 1989 for a total DOC/NOAA commitment of $5,000,000.

2) The instrumentation for IWRS consists of :
(a) an improved data positioning system (i.e. precise navigation equipment, (b) an improved flight data observing subsystem called Atmospheric Distributed Data Systems (ADD), (c) a dropwindsonde subdata system to obtain vertical profiles of meterological parameters below the aircraft and (d) communications VIA satellite relay system to the NHC.

3) The entire fleet of 20 USAF Weather reconnaissance aircraft will be equipped with IWRS; 10 aircraft used in support of NOAA's hurricane reconnaissance requirements and 10 used in the western Pacific Ocean for DOD typhoon requirements.

4) Excluding the DOD typhoon reconnaissance in the Western Pacific Ocean, NOAA normally flies about 10% of the operational hurricane reconnaissance for the National Hurricane Center with our two P-3's aircraft. This is usually the critical, close to shore missions (within 24 hours of landfall) when high density/accurate data are required. This is in addition to the hurricane research missions required by ERL scientists.

Cost/share Rationale: When NOAA established the Memorandum of Agreement with the USAF and OMB, it was determined that NOAA has complete access to 7 of the 20 planes used for weather reconnaissance (this includes winter storms and hurricane reconnaissance. The 70-30 split was deemed equitable for the upgrades.

QUESTION:

Other Decreases

You are requesting $9,985,000 as a reduction from your base related to nonrecurring program costs. Please provide for the record what these program costs are associated with.

ANSWER:

Integrated Flood Observing and Warning System	$3,000,000
Prediction of Storm Surges	485,000
Gulf Oyster Bed Diaster Relief	3,000,000
VISSR Atmospheric Sounder (VAS) Assessment Program	1,500,000
Bell Twin Engine Helicopter Purchase	2,000,000
Total	$9,985,000

QUESTION:

You are proposing Administrative cost savings of $7,875,000 related to administrative cost savings. Please provide for the record the details related to these cost savings and how you plan to achieve them?

ANSWER:

Administrative positions that are associated with proposed program decreases	$1,852,000
Improved management of administrative functions	850,000
Reduce positions in grades 11-15	3,073,000
Eliminate adminstrative functions in the field structure which duplicate services provided by the Regional Adminstrative Support Centers	1,900,000
Reduction of printing facilities	200,000
Total	$7,875,000

QUESTION:

What cost savings were achieved in 1986 as a result of your efforts?

ANSWER:

In FY 1986 savings of $1,167,000 were achieved by reducing the cost of positions in grades 11-15.

QUESTION:

You are proposing reductions of $750,000 related to productivity reviews. You are also proposing similar reductions in fiscal years 1985 and 1986. Please provide for the record how these reviews were achieved.

ANSWER:

The FY 1986 budget proposes a reduction of $7,151,000 related to productivity reviews, similar to the reductions proposed for FY 1985 and 1986. These reductions are based on an inventory of activities for which A-76 reviews are being conducted.

QUESTION:

What have been the savings generated through the Grace Commission recommendation related to the reduction of GS-11 through GS-15 positions?

ANSWER:

In FY 1985 savings were $500,000; FY 1986 savings were $1,167,000.

QUESTION:

What do you estimate those savings will be in 1987?

ANSWER:

We estimate that savings of $3,073,000 will be generated in FY 1987 by reducing the cost of positions in grades 11-15.

QUESTION:

Promote and Develop Fishery Products
Pertaining to American Fisheries

You are proposing to eliminate the grant program relating to the Saltonstall-Kennedy fund of $8,007,000 in FY 1987. Please provide for the record what the specific grants awarded were in FY 1986 and FY 1985, to whom they were awarded, and what kind of research was being conducted for these activities.

ANSWER:

The FY 1986 Saltonstall-Kennedy (S-K) grant award process has not been completed yet. Traditionally, S-K grant awards are made at the end of the fiscal year to allow time for proper soliciation and review of the proposals with awards made in the August/September time-frame. The information on the 56 projects funded in FY 1985 is attached.

QUESTION:

Foreign Fishing Observer Fund

You are proposing to reduce funding for the Foreign Fishing Observer Fund by $2,500,000, which would put the fiscal responsibility on the fishermen to contract for observer services. What has been the success of the contract program? What is the level of compliance under contract versus Federal employee observers? Can you compare the quality for each type of observer? Is there any difference?

ANSWER:

The supplemental or contract observer program has worked very well. The level of observer coverage has remained essentially full for foreign fishing within the FCZ allowing for certain safety consideration. In fact, prior to the authorization of the supplemental program, NOAA used contract observers. Under the supplemental/contract observer program whereby foreign fishermen contract directly for observers, NOAA approves the contractor, and in some cases the contractors are the same ones that we use. There has been no deterioration in the level of compliance, quality of observers, or the quality and timeliness of observer services.

QUESTION:

Fishermen's Guaranty Fund

You are proposing to transfer to Department of State the Fishermen's Guaranty Fund. What is the status of that legislation at this point? Will you continue to maintain this fund should the legislation not be enacted?

ANSWER:

The proposed legislation is still in the Executive Branch. We expect the proposed legislation to be approved, and the Administration has requested an FY 1987 appropriation for the Department of State. If the timing is such that the legislation has not been enacted by the beginning of FY 1987, NOAA would continue the Guaranty Fund program until it can be transferred to the Department of State.

QUESTION:

Aviation Weather Trust Fund

You are proposing an increase of $49,500,000 related to the transfer from the Aviation Weather Trust Fund. This includes an additional $2 million to support additional airports requiring FAA services because of airline industry deregulation. Please provide for the record how the $2 million was specifically constructed?

ANSWER:

Deregulation of the airline industry has resulted in the rapid expansion of service by air carriers operating under Federal Aviation Regulations (FAR), Parts 121 and 136. Carriers "operating for hire" are flying in and out of airports not previously served, requiring additional weather services. The weather services required are included in FAR's 121 and 135 as well as in agreements with the International Civil Aviation Organization for international flight. These additional requirements include:

- o Flight documentation folders (including graphic and/or alphanumeric forecasts of destination and en-route weather conditions) are required for international flight departures from the United States and its territories by international agreement. More advanced (higher performance) aircraft and the "service hub" concept are increasing the number of airports from which this service must be provided. $180,000 is required to support this activity.
- o The Supplementary Aviation Weather Reporting Stations (SAWRS) Program provides local operators with the capability to take surface weather observations to meet the FAR's. The NWS provides training certification of observers, forms, quality control, instructions, and periodic inspections. A combination of the deregulation of the airline industry and the inability of the federal sector to provide all of the surface aviation weather observations for operators to comply with the FAR's has resulted in the expansion of the number of participants in the SAWRS program. $518,000 is required to support this activity.
- o Training for aviation forecasters. The NWS does not currently have any courses devoted to the training of aviation weather forecasters. No meteorological discipline demands more precision nor is litigated more frequently or intensely than aviation weather. $350,000 is required to support this activity
- o $952,000 is required for Federal employee salary increases (merit increases).

QUESTION:

Forty-seven-million-five-hundred-thousand dollars is related to the procurement for the next generation weather radar (NEXRAD). Please provide for the record what the procurement schedule provides for in fiscal year 1987. How many locations would be provided the NEXRAD system? What is the total cost of the system? How is it being divided up between the three participating agencies and what the placement of items procured will be for the next four fiscal years by geographical location?

ANSWER:

With the FY 87 funding level, the NEXRAD program will begin the limited production contractual activity with the selected contractor, continue in-depth site surveys and install the selected contractor's pre-production model at the NEXRAD Operational Support Facility.

A contract for the production of 10 limited production and 162 full scale production units is scheduled to be awarded in February 1987 with the first limited production unit being delivered in February 1989. Based on preliminary estimates provided by the contractors, the cost of the NEXRAD system including full training, documentation, and logistic support, is currently estimated at $600 million; however, the contractors will provide firm fixed prices for a NEXRAD system with their proposal submissions in late May 1986. Based on the unit requirements of each participating agency, the production funding allocation for the Department of Commerce, Department of Transportation and Department of Defense is 51.5%, 20.7% and 27.8%, respectively. The following table identifies the preliminary site and priority location for installing NEXRAD systems through calendar year 1990.

Attachment

Location	Date of Installation
Oklahoma City, OK (Twin Lakes)	Feb 1989
Melbourne, FL	Apr 1989
Washington, DC	Jun 1989
Atlantic City, NJ (FAA trn)	Jul 1989
Kansas City, MO (NWS trn)	Aug 1989
Frederick, OK (Sup)	Sep 1989
ADW/DCA Washington, DC	Oct 1989
NW Florida, FL (Sup)	Nov 1989
Sacramento, CA (Depot)	Dec 1989
St. Louis, MO	Jan 1990
Denver, CO (Front Range)	Feb 1990
Chanute, IL (DOD trn)	Mar 1990
ATL Atlanta, GA	Apr 1990
Kansas City, MO (OakGrv)	May 1990
Topeka, KS (Wabaunsee)	May 1990
Wichita, KS	May 1990
East Alabama, AL (Sup)	Jun 1990
Tulsa, OK (Inola)	Jun 1990
Dodge City, KS	Jul 1990
MIA/FLL Miami, FL	Jul 1990
ORD Chicago, IL	Jul 1990
DFW Dallas, TX	Aug 1990
Goodland, KS	Aug 1990
Amarillo, TX	Sep 1990
Dover, DE (Sup)	Sep 1990
Grand Island, NE	Sep 1990
Charleston, WV	Oct 1990
DEN Denver, CO	Oct 1990
Philadelphia, PA (Ft Dix)	Oct 1990
Vandengerg, CA (Sup)	Oct 1990
Dyess, TX	Nov 1990
Indianapolis, IN	Nov 1990
Louisville, KY (Ft Knox)	Nov 1990
STL St. Louis, MO	Nov 1990
Chicago, IL (Joliet)	Dec 1990
Detroit, MI (Selfridge)	Dec 1990
Ft. Rucker, AL	Dec 1990
Pittsburgh, PA	Dec 1990

QUESTION:

Use Serviceable Polar Platforms

Has NOAA considered launch costs associated with using serviceable platforms vs. conventional satellites?

ANSWER:

We assume you are referring to NASA's proposed Polar Platform. NOAA is working jointly with NASA's Jet Propulsion Laboratory (JPL) to evaluate the costs, issues, requirements, and specifications that would be necessary if serviceable platforms are used in the future. No firm cost estimates have been developed to make a comparison.

QUESTION:

Were they subsidized costs?

ANSWER:

The above studies assumed NASA would pay for initial platform launches and NOAA would share costs of repair and servicing launches. Since these are only long-range options studies, they imply no guarantees.

QUESTION:

How much was the subsidy?

ANSWER:

The above studies assumed NASA would pay for initial platform launches and NOAA would share costs of repair and servicing launches. Since these are only long-range options studies, they imply no guarantees.

QUESTION:

What guarantee does NOAA have of continued subsidy?

ANSWER:

The above studies assumed NASA would pay for initial platform launches and NOAA would share costs of repair and servicing launches. Since these are only long-range options studies, they imply no guarantees.

QUESTION:

What costs are associated with modifying existing sensors to make them shuttle compatible or with designing and procuring new sensors if necessary?

ANSWER:

The spacecraft design, not the launch vehicle, is the driver for sensor changes. Any "block change" by NOAA from the current design, including the Polar Platforms, will require some sensor modifications.

QUESTION:

Considering the costs to design, procure, and orbit the platform; to design or modify and procure the sensors; and the costs to service the platform, is the platform cost-effective?

ANSWER:

The question of cost-effectiveness must be considered in the context of NASA's research and development mission. NASA is interested in platforms to provide a facility for mounting and operating a suite of observatory-class earth-observation sensors. This requires a large platform. NASA is studying whether this is a cost-effective approach. If cost effective for their needs, NOAA's shared use of the platform could also be cost effective.

QUESTION:

What is the likelihood of obtaining adequate funding for the platforms?

ANSWER:

This will depend on cost estimates for the platform, budget constraints, and mission priorities.

QUESTION:

To what extent will a funding squeeze stretch out the development and deployment of the platform(s)?

ANSWER:

This will depend on cost estimates for the platform, budget constraints, and mission priorities. NOAA is proceeding with the assumption, as stated by the NASA Space Station Office, that the first Polar Platform will be launched in November 1993 and ready for operations in February 1994.

QUESTION:

What impact will that have on the decision to transition to a platform?

ANSWER:

This will depend on launch schedule requirements to meet observation continuity and the costs of alternatives for transitioning to a new spacecraft design.

QUESTION:

Will more TIROS satellites be required?

ANSWER:

If NASA meets its present schedule of a late 1993 launch, NOAA could transition without additional satellites after NOAA K,L,M. With reasonable luck (all current satellites meet operational life and successful launches), NOAA could survive a one-year delay.

NASA is discussing with ESA their provision of a serviceable platform in a morning polar orbit. NOAA could consider providing operational sensors on this European morning platform in order to provide a backup for the afternoon orbit.

QUESTION:

ACCESSABILITY

The question of accessibility occurs at three levels: (1) getting space on the shuttle, (2) getting personnel to service the [polar] platform and, (3) getting to the [polar] platform after the shuttle is in orbit.

NOAA's plans for transition to serviceable platforms include a routine visit once a year. They believe a yearly visit will be required for regular updating and repair of sensors. However, with only three or four flights per year out of Vandenberg, which is our best estimate at this time, some experts in the field are predicting scheduled visits to be available only once every two or three years. There is also concern over NOAA getting "bumped" from space already allocated to it. As we understand it, the shuttle operation at Vandenberg is supposed to be strictly military, usually highly classified, using all military astronauts. Scheduling, payloads, and priorities will all be controlled by the Air Force. Although NASA and the Air Force have arranged for civilian satellites to be launched from Vandenberg on a quid pro quo basis, i.e., comparable service out of Kennedy for military satellites, obtaining technician type services to maintain the platform is another matter. It is doubtful civilian astronauts will be allowed on the flight. Therefore, arrangements will have to be made for Air Force astronauts to do the work which could create logistic, training, and priority problems.

Finally, NOAA is requesting an orbital altitude for the platforms that is higher than the shuttle's capability. This presents the problem of getting to the platform once in orbit. NOAA briefly mentions use of an Orbital Transfer Vehicle (OTV) to fly from the shuttle up to the platform, service the platform, and fly back. Two other possibilities are being discussed: one using an OTV to tow the platform down to the shuttle for servicing and back up again, and another equipping the platform with enough fuel and maneuvering capability to fly down to the shuttle for servicing and refueling and then back up to its orbital height. Each of these methods is purely conceptual at this time.

With the potential accessibility problem noted above, the [polar] platform may be less reliable in providing uninterrupted service than the current conventional system.

Given an all military operation, has NOAA been assured space on the shuttle?

ANSWER:

NOAA has not been assured space on the Shuttle at this time. We have, however, requested to be scheduled on the manifest for the geostationary (GOES I-M), and for Landsat launches (under the assumption that EOSAT will decide to continue Landsat).

QUESTION:

What priority will NOAA have?

ANSWER:

NOAA's priority on Shuttle launch manifests is undetermined at this time.

QUESTION:

Who will fly the Shuttle and perform the maintenance on platform service flights?

ANSWER:

It is expected that NASA would fly the shuttle and perform maintenance on platform service flights.

QUESTION:

If it is to be Air Force, will special training be necessary?

ANSWER:

We do not expect the Air Force to fly platform servicing Shuttle missions at this time.

QUESTION:

Who is responsible for failure to perform?

ANSWER:

The question of who is responsible for failure to perform has not yet been addressed.

QUESTION:

How will the astronaut(s) get from the shuttle to the platform?

ANSWER:

Current planning calls for the platform to be serviced by return to the Shuttle (STS) parking orbit for rendezvous and refurbishment.

QUESTION:

How well developed are the concepts under consideration?

ANSWER:

The concepts of spacecraft retrieval and refurbishment in orbit are still under development. However, we gain some confidence from the fact that the first attempt at in-orbit refurbishment on the Solar Maximum Mission satellite was a success.

QUESTION:

Will there be an adequate solution by NOAA's scheduled transition?

ANSWER:

NOAA expects these concepts to be further developed and well established over the next decade as the platform becomes operational.

QUESTION:

Are these concepts part of NOAA's or NASA's system?

ANSWER:

The concepts of retrieving and refurbishing missions in orbit are part of NASA's proposed system; NOAA is considering their potential for NOAA's system.

QUESTION:

If the platform is to maneuver down to the shuttle, will it be out of service during maintenance? How long?

ANSWER:

The platform would be out of service for maintenance for about two or three weeks.

Questions for the Record by
Congressmen Early

QUESTION:

What is the current status of the NEXRAD project? I understand the validation phase has been completed?

ANSWER:

The NEXRAD validation phase is scheduled to be completed on October 31, 1986. The design and fabrication of prototype systems is largely complete at this point in time with major efforts concentrated on test and evaluation activities. Selection of single source for the production phases is scheduled for late this year with contract award for limited production early in 1987.

QUESTION:

I understand you are also proposing $66.1 million in financing for NEXRAD from other sources. Please provide us with some detail of what you anticipate these other sources will be?

ANSWER:

There is some misunderstanding of the derivation and use of the $66.1 million in the President's budget proposal. The $66.1 million is made up of four separate components, three from various fisheries account and the fourth a sum of miscellaneous deobligations. The $66.1 million will be used as a offset to NOAA's total requirements, not expressely for NEXRAD.

QUESTION:

I understand that your total FY 1987 budget request is $916.0 million. What was your original request to OMB?

a. Of the reductions we see in the FY 1987 budget request, how much did NOAA appeal to the Department for and in which program areas?

b. What percentage of all FY 1987 Department appeals to OMB were attributable to NOAA appeals? How much was granted by OMB to the Department of Commerce?

ANSWER:

The total FY 1987 request to OMB was $1,280.2 million.

a. NOAA appealed $26.48M of program cuts to the Department and received $2.43M. All programs which were appealed are listed below. The Department approved the Undersea Research Program Appeal ($1.48M), the Hydrographic Field Parties appeal ($.45M), and the Solar-Terrestrial Research and Techniques Development appeal for $1.5M.

Appeals to the Department ($M)

Grants to States	8.0
Water Resources Forecasting System (WARFS)	1.05
NOAA Data Transmission System	2.5
Undersea Research Program (NURP)	1.48
Support to Institute of Naval Oceanography	1.0
NOAA Hydrographic Field Parties	.45
Reduce Fire Weather Services	.80
Ocean Data Collection	2.0
National Centers	2.0
Solar-Terrestrial Research and Technique Development	1.5
RITS	2.5
Reactivate OCEANOGRAPHER	4.2
TOTAL	26.48

b. The Department appealed a total of $194.6 million to OMB. Of that total, $175.9 million or 90% was for NOAA. OMB granted $55.3 million to the Department. Of that total $42.8 million or 77% was for NOAA.

QUESTION:

Please provide for the record a table displaying, for each of NOAA's major program areas, the amount NOAA requested from DOC, DOC's submission to OMB, and the amounts approved by OMB, in FY 1987?

ANSWER:

See attached table.

QUESTION:

Please explain for the record the DOC and OMB definition of adjustement-to-base. Also explain the individual adjustments to base in the FY 1987 budget submission.

a. In looking at the budget request, I see that proposed program rescissions are displayed as adjustments-to-base rather than being shown as program decreases, which they certainly are. I thought adjustments to base usually included only items like telephone and postal rate increases, GSA SLUC increases, etc.

b. Last year your budget request reflected NOAA's adjustment-to-base, built in changes requests and the President's Deficit Reductions Program (2901 reductions). Please detail what these "built in changes" incorporated? Are the same "built-in-changes included in your FY 1987 budget?

c. Last year this Committee restored 80% of the 5% paycut mandated by the 2901 reductions. How has this 1% pay cut affected NOAA?

d. Were the 2901 reductions made in FY 1986 automatically assumed in the FY 1987 base? Similarly, were the section 515 savings/reductions assumed in the FY 1987 base? Or, did you recoup any of these reductions in your FY 1987 budget?

ANSWER:

The concept of adjustment-to-base has evolved in the Department as a method of showing how much it will cost in the budget year to maintain programs which will recur in the budget year at the current year level. The justifications for the individual items are shown on pages NOAA-33 to NOAA-38 in the NOAA Budget Estimates for FY 1987.

a. In preparing the 1987 Congressional budget, the 1986 appropriation was enacted and the rescissions were proposed for 1986, therefore identified in the adjustments-to-base section of the budget. They were not 1987 program decreases.

b. Yes, there are built-in changes in the 1987 Congressional budget. They are itemized with detailed descriptions beginning on page NOAA-33 of the budget justification. Last years' budget included different built-in changes.

c. The $29 million reduction for pay was absorbed in base. Actual pay was not reduced.

d. Restoration for the Deficit Reduction Act savings is being requested in the 1987 base.

QUESTION:

As you know, your FY 1986 budget assumes - $51,919,000 in sequestered funds in accordance with the 4.3% reductions. How will this cut impact on NOAA activities and NOAA's ability to monitor programs?

a. Will a supplemental be required?

b. Do you anticipate reprogrammings in the effort to meet this reduction? If so, please provide specific details providing what accounts you will reprogram from, and how much?

c. Will any RIF's or furloughs be required? If so, how many days do you anticipate you may be forced to furough? Or, how many employees do you anticipate that you may have to RIF?

d. Assuming you have to RIF, what will be the costs involved?

ANSWER:

NOAA's programs were reduced across the board by 4.3%. NOAA's ability to monitor programs would be reduced in all cases, and would be reduced an unacceptable amount in some instances. To cover the unacceptable reductions, a reprogramming is being proposed.

a. No.

b. Yes. The costs will be covered through a 19% reduction assessed against Congressional add-ons and restorations to the President's FY 1986 budget. The only exceptions are in cases:

1. Where funds have already been obligated;

2. Where the full funding is one-time in nature and required to fullfil Congressional directions; or

3. Where further reductions below the G-R level would necessitate furloughs or RIFS.

c. If the proposed reprogramming is approved, RIF's or furloughs would not be required.

If the proposed reprogramming is not approved and an acceptable substitute proposal could not be found, furloughs would be required for approximately 9 days.

d. We do not anticipate the need to RIF employees.

QUESTION:

Assuming Congress does not act on these rescission requests and maintains programs like Sea Grant and CZM, what impact will it have on NOAA?

ANSWER:

Since Congress did not approve NOAA's FY 1986 rescission request, NOAA will proceed to issue grants through those programs in accordance with our FY 1986 appropriations. Reapportionment advice releasing the unobligated Coastal Zone Management and Sea Grant funds previously proposed for rescission has been received from OMB. CZM and Sea Grant award actions obligating those funds will now be processed in a timely and efficient in accordance with the scheduled start dates for individual programs.

QUESTION:

Can you explain for me how DOC, or OMB, considers as enhancements FY 1987 program funds which are not new programs or new initiatives?

ANSWER:

Enhancements include both new programs and increases to current programs which change the scale or scope of the program

QUESTION:

Can you explain for me, with some specificity, how the following areas of estimated savings differ from one another -- other than by "name". For example, what is the difference between "administrative cost savings" and savings from "productivity review"? Aren't we talking about the same thing -- administrative or overhead savings?

a. Do any of these savings relate to proposed FY 1986 program rescissions?

ANSWER:

The difference between "administrative cost savings" and savings from "productivity review" is significant. Administrative cost savings relate to reducing positions that are administrative as opposed to programmatic. Productivity review savings refers to the process under OMB Circular A-76 whereby programs are reviewed to determine the most cost effective method for conducting operations.

a. No.

QUESTION:

For each of the following areas, please provide for the record a table displaying, by major program areas, the categories in which savings are achieved (e.g., printing, consulting, and travel) and the amount of the projected savings.

a. Program freeze
b. Administrative cost savings
c. Productivity reviews

ANSWER:

In FY 1987, NOAA did not identify savings under a "program freeze" category; however, 260 positions and $7,875,000 were identified as administrative cost savings, and 728 positions and $7,151,000 were identified as productivity review savings. Only labor and benefits were identified for the projected savings.

The distribution of the administrative cost savings by major program area is listed below. The major program areas for the productivity reviews savings are idenified in the response to question below.

Administrative Cost Savings by Major Program Area

(Amount in thousands)

Ocean and Coastal Programs	$ 932
Marine Fishery Resources Programs	1,480
Atmospheric Programs	2,827
Satellite and Environmental Data and Information Services	839
Program Support	1,797
	7,875

QUESTION:

In what areas will productivity reviews be conducted in FY 1986/FY 1987?

ANSWER:

Current plans call for productivity reviews to be conducted across NOAA as follows:

Administrative Services

- Mountain Administrative Support Center library and supply services

Satellite Data and Information Services

- National Climate Data Center ADP, archival and other functions
- Library and information services
- Satellite operations, data collection and processing, ADP services, calibrations and technical services
- ADP functions at National Oceanographic Data Center and National Geophysical Data Center

National Marine Fisheries Service

- ADP and facilities maintenance at the Northwest, Southeast, Southwest, Northwest and Alaska Fisheries Center and Washington, D.C., headquarters
- Seafood inspection program

National Ocean Service

- Aeronautical and Marine charting
- Atlantic and Pacific Marine Centers
- Geodetic resource management
- Engineering and survey planning activities

Oceanic and Atmospheric Research

- GFDL computer operations
- Facilities maintenance AOML Lab

National Weather Service

- Communications operations installation and maintenance
- Alaska and Hawaii Region engineering equipment maintenance and observations
- Airport observations
- NMC computer operations
- Overseas operations
- Training, systems development and operations/AFOS communications systems

QUESTION:

Please explain, with specificity, the benefits accruing to NOAA from the newly established Administrative Support Centers.

a. How much are they costing and what is NOAA's share of these costs? What is the estimated share for FY 1987? How does this compare with prior years?

b. Do you think you are getting your money's worth? If so, why? If not, why not?

c. From NOAA's point of view, has it been more cost effective than the previous arrangement?

d. Please provide a comparison of DOC and NOAA administrative costs before and after establishment of these centers?

ANSWER:

a. The total costs of providing the basic (core) services in FY 86 are $27.7 million. NOAA's share of these costs for is $24.4 million or 88%. These amounts are based on the proportion of services provided to the different bureaus. In the metropolitan area, National Capital Administrative Support Center provides services only to NOAA. In the field, NOAA's share is 83% of both the costs and the use of services. Both the total and NOAA's share of the costs in FY 87 should be approximately the same.

b. Yes. The ASCs are providing quality, cost effective service to all components of NOAA and other Departmental bureaus in the field.

c. Yes. The creation of the ASCs resulted in the consolidation of administrative support services. This consolidation allows the use of cost effective, automated administrative support systems which were not practical in the previous organizational arrangement. The proposed reorganization in the administrative area will result in additional improvements in NOAA's administrative management.

d. An actual comparison of operating costs before and after the implementation of the ASCs is difficult to make because administrative functions were spread through a large number of organizational components, both at headquarters and in the field. There are no good cost estimates for the total establishment of these centers.

QUESTION:

You are requesting a total of $836,479,000 for OR&F for FY 1987. This does not include the transfers of $46 million from the Promote and Develop Fund or $8.3 million from the Coastal Energy Impact Funds or $1.8 million from the Fisheries Loan Fund.

a. Wouldn't these financing offsets require legislative changes?

b. Congress has repeatedly refused to consider legislation allowing you to offset S-K receipts, yet NOAA repeatedly attempts to do this year after year. If the S-K transfer receipts were approved, how would you fund the NOAA programs which have been supported by S-K funds thus far?

ANSWER:

a. The proposed appropriation language will be sufficient to permit the transfer of the funds to OR&F.

b. The Congress has transferred most of the S-K receipts as an offset to OR&F for the past several years. If all the S-K funds are transferred to OR&F, the industry assistance grants currently funded by S-K would be discontinued.

QUESTION:

Decreases totalling $15,893,000 are proposed for activities that NOAA claims are not appropriate for the Federal Government to fund and operate. Proposed decreases include: Striped bass research, anadramous fisheries grants, fisheries grants to states, fisheries development research, fish product quality, and safety research (PQS), Menhaden research and development, fish oil research, and financial services program.

Please provide the detail and rationale that the Department of Commerce and NOAA used in implementing these cuts?

ANSWER:

The rationale for proposing reductions to the specific program identified in the question vary somewhat but can be group as follows:

o Fisheries grants (striped bass, anadramous and grants to states) provide funding for state programs that primarily benefit the states and local region and which the Federal government has little or no control over how the funds are used. Given that and the fact that under the grants to states program which provides funds to other than coastal states and used for programs not related to NOAA's mission or marine fisheries in general, the Department and NOAA believe that it is inappropriate to continue funding, given the Federal deficit, and anticipate that states would continue those programs that they feel are important.

o Fisheries development research and product quality and safety research are areas that industry should support. NOAA will maintain a core product, quality and safety research program to assist industry in this area, support the inspection program, and work with the Food and Drug Administration. It is industries' role to develop and promote its own products.

o Menhaden research and development has been funded for two years and continued Federal funding is not needed in FY 1987. The industry can take the results of this project and develop commercial products for economic gain.

o Fish oil research will not require further Federal funding in FY 1987 as industry can use the standards and quality controls developed by NOAA in FY 1986 to provide NIH with fish oil products for research needs.

o Financial service programs that are appropriate Federal responsibilites, such as portfolio management, will continue but at the Departmental level thus allowing NOAA to reduce its budget and the Department to achieve overall economy savings.

QUESTION:

What are your non-recurring adjustments-to-base for FY 1987? Specifically, what are these non-recurring costs?

ANSWER:

Non-recurring programs: $9,985,000

The Congressional add-on of $3,000,000 associated with the Integrated Flood Observing and Warning System is not required in FY 1987. The FY 1986 funding is sufficient to provide flood warning services in high-risk areas. Under this program, states and localities fund operation and maintenance of the systems, so NOAA does not require recurring funds.

NOAA received an FY 1981 increase of $750,000 to improve forcasting techniques used to predict storm surges. Of this amount, $485,000 will non-recur in FY 1987.

The FY 1986 add-on of $3,000,000 associated with the gulf oyster bed will non-recur in FY 1987.

$1,500,000 for the VISSR Atmospheric Sounder (VAS) non-recurs in FY 1987. This funding change was built into the original VAS program request. It reflects a planned decrease in requirements, due to completion of the VAS development phase and transition to the operational phase.

The Congressional add-on of $2,000,000 is not required in 1987. This add-on reflects a one time cost for the purchase of a Bell Twin Engine Helicopter.

QUESTION:

Please provide for the record from what programs the $63,323,000 FY 1986 rescissions are proposed?

ANSWER:

The following programs were proposed for rescission in FY 1986:

Sea Grant
Coastal Zone Management-State Assistance Grants

However, the Congress did not vote to confirm the rescissions within the allotted time period, so the funds are being obligated for the program purposes.

QUESTION:

Your FY 1987 budget proposes $62,699,000 in reductions in fisheries programs. Please provide the detail and rationale that the Department used in implement these cuts?

ANSWER:

The rationale for $15,893,000 of the $62,699,000 in proposed reductions has been detailed in a previous answer. As for the remaining proposed activities that can be eliminated or reduced, activities that have been added to the NOAA budget for which funding was never requested and in some cases fund activities that are not directly related to NOAA's fisheries mission. Given the Federal deficit problem that we all face, these reductions need to be made and will not adversely impact the management of the Nation's living marine resources for FY 1987.

QUESTION:

Again, you are proposing a decrease of $3,518,000 for the Mapping, Charting, and Geodesy Programs. How did NOAA or the Department determine that these were "lower priority activities."

ANSWER:

The decreases of $564,000 in Aeronautical Chart Services and $754,000 in Nautical Chart Services reflect a different financing method and are not considered a "lower priority activity." These decreases reduce budget authority for NOAA overhead costs. These costs will be reimbursed to NOAA from other Federal agencies as the Federal users' share of data base maintenance and compilation costs applicable to aeronautical and nautical chart products. The Federal user fees were implemented in FY 1986.

Other program reductions, totalling $2,200,000, are lower priority programs and include the Vertical Network ($500,000), Technology Extension Service ($550,000), South Carolina Cooperative Geodetic Surveys ($400,000), and Multipurpose Cadastre System ($750,000). The Vertical Network readjustment will continue on a reduced level from 10,000 kilometers of releveling per year to 6,000 kilometers of releveling per year and the completion date of the vertical readjustment will be extended to 1995. Users of the Technology Extension Service, the South Carolina Geodetic Survey and the Multipurpose Cadastre System will continue to receive NOAA guidance. However, other Federal, state, and local agencies and private surveyors will be expected to voluntarily replace and relocate National Geodetic Reference System monuments, and state specific survey needs will be the responsibility of the state concerned.

QUESTION:

Both President Reagan and Prime Minister Brian Mulroney have stated recently in the media that acid rain is a growing concern and man-made problem. What efforts has NOAA made in this regard? I see you maintained NOAA's acid rain research program at the samel level appropriated by Congress in FY 1986. Wouldn't more resources be helpful?

ANSWER:

Considering the level of understanding of the acid rain problem, the number of scientists available to NOAA, and the current capability of instruments, NOAA would find it difficult to progress more quickly in understanding the acid rain phenomena even if additional funds were available in FY 1987. The present level of funding is sufficient. A summary of the current NOAA program in acid rain follows:

Project	Lab*	Objective
A. NATURAL SOURCES:		
Theory	AL	Assess the role of natural emissions in acid and oxidant formation.
Field measurements	AL	Determine fluxes of natural nitrogen compounds from soils.
Ammonia detector development	AL	Develop a reliable means of measuring ammonia fluxes
Alkaline dust	ARL	Estimate the fluxes of neutralizing alkaline dust into the atmosphere.
Oceanic sulfur sources: Gulf	AOML	Complete estimation of sulfur influx into southeastern U.S.
Oceanic sulfur sources: Pacific Northwest	PMEL	Measure sulfur influx rates across upper west coast.
B. TRANSPORT:		
Trajectory development	ARL	Determine the climatology of air mases arriving at key sites.
Global transport	ARL	Assess the large-scale meteorological patterns that distribute acids.
West. Atl. Outflow (WATOX)	ARL	Determine the fraction of acids that leave the U.S.
Mountain-top observatories	ARL	Provide meteorological support for mountain -top stations in the eastern U.S. where forest damage is suspected.
C. CHEMISTRY		
Nitrogen chemistry	AL	Determine the major features of the formation of nitric acid.
Laboratory gas-phase	AL	Measure the rates and products of acid-forming chemical reactions.
High-pressure/ heterogeneous reactons	AL	Determine the rates of acid-forming reactions at atmospheric pressure and the loss of oxidants to surfaces.
Theoretical chemical modeling	AL	Assess the understanding of the formation of acids and oxidants.

D. DEPOSITION MONITORING

Global trends	ARL	Determine the global acidic deposition that man's activities are perturbing.
Eastern research site: Penn State	ARL	Develop new methods of wet deposition monitoring.
Western research site: Niwot Ridge	AL	Develops means of monitoring western air quality and deposition.
Dry deposition	ARL	Develop methods of measuring dry deposition and establish a pilot network.

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*AL = Aeronomy Laboratory, ARL = Air Resources Laboratory, AOML = Atlantic Oceanographic and Meteorological Laboratory, PMEL = Pacific Marine Environmental Laboratory.

Questions for the Record by Congressman Akaka

QUESTION:

Subarctic Bloom Research

What is the nature of the subarctic bloom research funded by NOAA in FY 1986.

ANSWER:

The $600K Congressional add-on for FY 1985 and 1986 supported contract research conducted by the University of Alaska and the Oceanic Institute of Hawaii on the coupling of primary production (plankton bloom) with the recruitment and survival of fish and shellfish in Auke Bay, Alaska, a subarctic marine ecosystem. This work was a two-year study which was conducted as part of the APPRISE (Association of Primary Production and Recruitment in a Subarctic Ecosystem) program. The APPRISE program is an interdisciplinary, collaborative research effort which seeks to quantify the relationship between trophic energy transfer, the physical environment, and the successful recruitment of commercially important fish and shellfish in subarctic waters. Field work is conducted in Auke Bay, Alaska, which represents a semi-enclosed model of a subarctic fishery ecosytem. Predictive models resulting from these studies should have applicability for other more extensive and less accessible subarctic fishery ecosystems.

QUESTION:

What is the problem that this research is designed to address?

ANSWER:

A basic assumption in fish recruitment studies has been the concept that successful year-classes occur when species match their larval abundance to the primary production cycle of their environment.

This multi-year research effort was designed to a) describe the association between primary productivity (plantonic growth rate processes) and optimal larval recruitment, and b) describe the variability of this association and how it relates to the physical environment (e.g., temperature, water clarity, nutrients, current patterns, etc.) in any given year.

Defining the relationship between the physical environment and larval recruitment can provide a basis for predicting fish and shellfish recruitment based on assessment of the pattern of changes in the physical environment.

QUESTION:

What benefits to Pacific fisheries are anticipated from this research?

ANSWER:

The results of this research will contribute to improved understanding of the productivity base for fisheries resources in subarctic ecosystems. This information is needed for developing resource recruitment/abundance prediction - oceanographic condition relationship models. Improved predictions on future-year resource abundance will permit more effective management strategies to be developed for North Pacific groundfish and shellfish. This will also provide the information needed by industry for developing investment strategies consistent with likely future resource availability.

QUESTION:

What amounts were appropriated for this research in FY 1986, and what amounts are included in the FY 1987 budget request for this research?

ANSWER:

The FY 1985 and FY 1986 NMFS appropriations each included $600K Congressional add-ons for subarctic fisheries research. Since the FY 85 and 86 funds will permit completion of this two-phase (i.e., two-year) study, the FY 1987 budget proposed by the President does not include funding for additional contracts and there are no plans for this effort to be continued in future years.

QUESTION:

Hawaiian Weather Data Buoys

What is the current status of the NOMAD deep ocean weather data buoy program in Hawaiian waters?

ANSWER:

Four NOMAD data buoys are deployed and operating approximately 300 miles from the Hawaiian Islands (1 northwest, 1 southwest, 1 southeast, and 1 south of Honolulu). A fifth buoy is located in Honolulu for quick replacement of any buoy that fails.

QUESTION:

What are the benefits to island inhabitants and to boaters in Hawaii and the Pacific from the data gathered and disseminated by this buoy network?

ANSWER:

The four deep ocean (Hawaiian Islands) buoys provide wind direction and speed, have heights and periods, sea level pressure, air temperature and sea surface temperature data.

The buoy data and other observational data, such as that from satellites, assist in monitoring conditions and contribute to detecting and forecasting atmospheric and oceanic phenomena affecting Hawaii and parts of the Pacific Basin. Buoy measurements also assist in monitoring large swells generated by intense storms far from the Islands.

QUESTION:

What amounts were appropriated for operation and maintenance of Hawaii NOMAD buoys in FY 1986, and what amounts are included in the FY 1987 budget request for this program.

ANSWER:

NOAA's FY 1986 appropriation includes $600,000 for operation and maintenance of the four NOMAD moored buoys deployed in Hawaiian waters as a result of Congressional add-on appropriations in FY 1984. In view of higher priority program and resource considerations, no funding is requested for these buoys in FY 1987.

QUESTION:

Weather Data Buoy Research

What amounts were appropriated for weather data buoy research in FY 1986, and what amounts are included in the FY 1987 budget request for this program?

ANSWER:

NOAA's FY 1986 appropriation for weather data buoy research (system engineering and test activities) was $770,000. In FY 1987, the overall budget proposed for the National Data Buoy Center is $10,236,000. The reduction of $574,000 reflects system engineering and testing activities that can be delayed. Sufficient funds will be available to continue essential activities in support of the existing buoy network.

QUESTION:

What are the benefits of this research and what programs does this research support?

ANSWER:

Data buoy system engineering and test activities support operational demonstration of new marine applications for data buoys. This program also ensures that buoys are compatible with changes in satellite data relay systems and other data handling systems.

QUESTION:

Interisland Buoys in Hawaiian Waters

What is the status of the interisland buoy to be deployed in Hawaiian waters during FY 1986?

ANSWER:

One interisland discus buoy, deployed in December 1985, is operating in the Alenuihaha Channel. This buoy is functioning in a demonstration mode; and provides observations for operational warnings and forecasts.

QUESTION:

What are the potential benefits to island inhabitants and to commercial and recreational boaters in Hawaii from the data gathered and disseminated by this interisland buoy?

ANSWER:

The interisland buoy provides wind direction and speed, maximum wind speed, wave height and period, surface pressure, and air sea surface temperature data from Alenuihaha Channel.

Wind and wave information from this buoy is one data source used in preparing warnings and forecasts in the Hawaiian channels, including heavy surf and coastal flooding advisories.

QUESTION:

What is the annual cost to operate and maintain this buoy and what is the procurement cost of an interisland buoy of this type?

ANSWER:

Cost to implement interisland buoys, including all procurement expenses, is $120,000 per buoy. The annual cost to operate and maintain each interisland buoy is $40,000.

QUESTION:

Hawaii Undersea Research Program

What work will be undertaken by the Hawaii Undersea Research Program funded by Congress in FY 1986?

ANSWER:

During 1986, much of the time and resources will be spent to prepare the new PISCES V submersible for operations and to test a new launch, recovery, and transport (LRT) platform for this submersible. In addition, a 60-dive science program will be conducted with the shallow-water submersible MAKALI'I and the new PISCES V. Of this program, 30 dives will be devoted to seamount resource studies on Penguin Banks, the site of a new fish habitat emplaced by the National Marine Fisheries Service. This investigation will be integrated with a series of dives by the U.S. Geological Survey on geological resources associated with seamounts. A series of 15 training dives will be conducted with the PISCES V and its new LRT. Following this training, 30 dives will be conducted to support a research program on Loihi submarine volcano and Cross seamount. Both of these targets have been well surveyed and are within easy access of Oahu.

QUESTION:

What are the benefits of undertaking this program?

ANSWER:

Seamounts constitute a dominant feature of the Pacific Basin. Heavy concentrations of desirable fish species and deposits of cobalt-enriched manganese crusts have been discovered in association with seamounts. As a result, NOAA's National Undersea Research Program at the University of Hawaii has undertaken a multidisciplinary study on seamount ecosystem properties and processes. Results from this research will be used to determine the potential for fisheries development and mineral recovery of seamount resources. In addition, an evaluation of the potential environmental effects of resource recovery activities will be made.

QUESTION:

What amounts were appropriated for this program in FY 1986, and what amounts are included in the FY 1987 budget request for this program?

ANSWER:

The FY 1986 appropriation for the National Undersea Research program includes $1,435,500 for the program at Hawaii. Since the NURP program primarily benefits state, regional or private sector interests, the FY 1987 budget proposes to terminate Federal funding responsibility for the program.

QUESTION:

What are the additional costs associated with obtaining and equipping a launch vessel for this submersible?

ANSWER:

According to current industry estimates, a support vessel for a PISCES-Class submersible would cost $2,500,000 and funds for equipping such a vessel with an A-frame launch and retrieval system amount to $900,000, for a total of $3.4 million.

Questions for the Record by
Congressman O'Brien

QUESTION:

Has NOAA developed a comprehensive research plan to assess the ocean disposal option for hazardous waste? Has the research plan been peer-reviewed by outside scientists?

ANSWER:

NOAA and other agencies have conducted many research studies related to ocean disposal of hazardous wastes. Adequate information now exists to answer many of the questions that arise during consideration of the ocean disposal option for these wastes. EPA has developed a comprehensive, Federal research plan to assess the ocean disposal option, which NOAA has reviewed.

QUESTION:

What is NOAA doing to support research on seabed disposal of radioactive waste?

ANSWER:

NOAA does not have a research program directed specifically at ocean disposal of radioactive wastes. However, NOAA has conducted and is continuing to conduct efforts that have application to the determination of the fates and effects of radionuclides in the ocean. Extensive research has been carried out on mixing and dispersion of wastes in the ocean. Although emphasizing near-surface processes, some of the results are applicable to the near-field distribution of radionuclides released at the sea bottom. Related studies have examined settling and distribution of particulate waste components, emphasizing processes of flocculation and coagulation. This work has application to the distribution of particle-bound radionuclides that are resuspended into the water column from the sea bottom.

QUESTION:

State/Federal Weather Modification Program

In the past 3 years, research on weather modification, as part of the Federal/State Cooperative Program between NOAA and 4 states, has produced several interesting and fundamental findings.

Efforts in Utah using project-developed radiometers and doppler radars have discovered new volumes of supercooled water in mountain clouds, making it now easier to obtain increases in snow. Their airflow studies have illustrated where and when to release seeding materials dispersion in complex mountainous terrain, and they have also developed a stable new isotope-ice crystal structure technique for locating the snow growth regions in winter clouds. These fundamental discoveries have greatly enhanced existing techniques to predictably enhance snowfall in the mountainous western United States. Do you consider these results to be inconclusive? If so why?

ANSWER:

These results are encouraging because they provide some insight into the processes that produce mountain snowfall, but they are inconclusive because the impact of this new knowledge on efforts to increase or decrease precipitation has not been shown.

QUESTION:

Research by midwestern scientists and funded by the Illinois project has identified a class of summer clouds that appear suitable for modification to increase rainfall, and a carefully stated and testable modification hypotheses has been elucidated. The research program has generated 29 scientific papers published in the journals in the past 4 years. Does this progress indicate a lack of progress or that their results are inconclusive?

ANSWER:

While scientifically and academically interesting hypotheses have been elucidated and several papers published describing the hypotheses, no experimentation has successfully proved or disproved the theories. In the sense that new theories are themselves progress toward understanding, some progress is being made. Direct and measureable progress toward enhancing or decreasing precipitation is inconclusive.

QUESTION:

It seems to us, upon review of the scientific and technical achievements of these state projects, which have included sizable support for scientific training and student education at 11 universities, that significant progress has been made. Seeding techniques, tracer techniques, and project evaluation methods developed in the past 3 years are now in use by the private sector, further revealing utility and conclusive results. Do you disagree with this view?

ANSWER:

Federally funded efforts have indeed furthered the study of cloud and precipitation processes and have aided many students in obtaining advanced scientific degrees. Several student papers have added to the number of published research studies. The papers have not demonstrated the ability of weather modification program funded efforts to either enhance or diminish the amount of precipitation received at the ground. The papers primarily describe and discuss the efforts to develop and apply new tracers, observing tools, statistical analyses, and the like, rather than announcing either increased or decreased precipitation.

QUESTION:

The Illinois cloud modification project has studied clouds throughout the Midwest; agricultural leaders from 4 states planned the Illinois-managed PACE project; scientists at 4 state universitites have done the research to date; and the results of PACE are applicable to learning how to effectively alter summer rain anywhere in the midwest. This effort has clear value to the Corn

Belt and thus to the Nation's economy. Do you consider this to be solely Illinois' responsibility to fund? Doesn't its regional effort call for federal involvement?

ANSWER:

The Illinois cloud modification project has studied clouds throughout the midwest, but no studies to date have shown conclusive evidence that precipitation will be enhanced or diminished. If future attempts to increase or decrease precipitation prove conclusive in Illinois, many scientists speculate some applicability to neighboring states.

QUESTION:

All major assessments of the weather modification field in recent years by the Academy and including an Advisory Board assembled for 2 years (1977-78) by the Department of Commerce, as a result of PL 94-490, have urged that the federal government be the primary funder of weather modification research. The Advisory Board to Commerce further called for NOAA to be the lead agency in a national effort based on the rationale that NOAA was the nation's weather arm. Given the uniformity of the recommendations from these various policy assessments, why does NOAA continue to ignore the field and to systematically delete over the past 4 years funding for weather modification research? Congress has repeatedly urged support for the Federal/State Cooperative Program approach. NOAA seems unable to address its obvious role. The efforts are not inconclusive and they are in the national interest. What is the problem?

ANSWER:

The uncertainty of the results of our efforts to increase or decrease precipitation suggests that a much larger problem exists, requiring a much different effort than the current grants-to-states effort that NOAA supports. NOAA believes that more significant national benefits may be obtained over a shorter time period by applying its efforts to improving precipitation warnings and forecasts.

QUESTION:

In the winter 1986 issue of your own journal entitled NOAA, there is a feature article about the importance of this federal-state program in weather modification research to national water issues. It describes major scientific findings and the broad regional applications of the results. Now, within the 2 months after publication, we find the program funds for FY 1986 are proposed for reprogramming, and as in the past 3 yearss, the program and its funds for FY 1987 terminated. What is the basis for this glaring inconsistency?

ANSWER:

NOAA believes that its mission priorities to supply weather forecasts and warnings can better be served by applying resources to programs which have demonstrated more immediate payoff in terms of improved services.

Questions for the Record by
Congressman Regula

QUESTION:

Acid Precipitation

NOAA participates in the Interagency Task Force on Acid Rain and as such has requested an appropriation of $4.4 million (the same level as in FY86) for continuation of this research. "Acid rain" remains a major concern between our Nation and Canada, especially with this week's visit by Prime Minister Mulroney and the recently released Davis-Lewis report on acid rain. Do the finding of the Davis-Lewis report parallel the findings which the Task Force has uncovered?

ANSWER:

President Reagan and Prime Minister Mulroney have officially endorsed the Report on Transboundary Acid Rain submitted to them by their Special Envoys, Drew Lewis and William Davis. This endorsement includes an acceptance of its findings and a commitment to actively pursue implementation of its recommendations. The report makes recommendations in three areas: initiation of a major multiyear program for the commercial demonstration of cost-effective and innovative pollution control technologies for major sources of acid-forming pollutants; continued emphasis on research to help answer critical scientific questions related to transboundary acid rain; and enhanced cooperation between the United States and Canada such as regular bilateral consultations and information exchange.

There are two aspects of the Lewis-Davis report about which NOAA especially posseses expertise. But, as a general remark, NOAA believes that the science found by the Task Force is consistent with that described in the Envoys' report. The major recommendation of the Envoys' report deals with research on the removal of sulfur from coal. The Task Force has not devoted much effort to control technologies and is leaving this work largely to ongoing EPA and DOE activities.

The Envoy's report points out that acid rain in eastern North America is largely of anthropogenic origin. This position has been documented through the Task Force by showing that the most intense acid rain falls within the downwind of the region of highest emissions on sulfur dioxide. This high acid deposition area in Ohio, southern Ontario and environs is much more acidic (and with higher sulfate deposition) than in pristine parts of the globe where the Task Force has been making measurements.

In the atmospheric sciences, the Envoys single out the need for dry deposition measurements. The Task Force has been doing the same. The reason for the failure to put a dry deposition network in place so far is the lack of generally acceptable techniques to measure dry deposition. The Task Force is gradually overcoming these impediments and will, in the next year, embark on a program of dry deposition measurements largely in eastern U.S. using techniques similar to those in Canada and Sweden.

The Special Envoy process enables both nations to take an independent look at the very difficult transboundary acid rain issue. The envoys are to be congratulated for their joint efforts. Their frank and candid discussions culminated in a set of common recommendations for both countries to build upon collectively in future discussions.

QUESTION:

Your budget proposes the establishment of a Mission Control Operations Center for the COSPAS/SARSAT program. What other nations will be participating in this international effort and what is their level of contribution?

ANSWER:

Participating nations in the COSPAS/SARSAT program and their contributions in the Mission Control Center activities are as follows:

U.S.S.R. - Mission Control Center for eastern Europe, the Soviet Union, and the northwest Pacific. Four local user terminals.

Canada - Mission Control Center for Canadian area of search and rescue responsibility. Three local user terminals.

French - Mission Control Center for western Europe, N. Africa, and eastern Atlantic. One local user terminal.

U.S.A. - Mission Control Center for the U.S., Central America and adjoining maritime areas where the U.S. has search and rescue responsibility. Currently three local user terminals with two more projected to cover the U.S. area.

United Kingdom - Mission Control Center convering British Isles and northeastern Atlantic. One local user terminal.

Norway - Mission Control Center covering Scandanavia and European polar region. One local user terminal.

Brazil - Expecting to establish a Mission Control Center and the first of three local user terminals in the first quarter of FY87.

QUESTION:

Sea Grant

Again this year the Administration is proposing elimination of the Sea Grant College Program, transferring responsibility for the program to state and local governments. Participants in the program believe, however, that, should the federal contribution to the Sea Grant program be terminated, the program will cease to exist, rather than be picked up by state and local governments. Can you provide assurance that this program would continue should its termination on the federal level take place?

ANSWER:

We believe that the consistently high level of non-Federal matching funds being contributed to the Sea Grant programs indicates that those activities deemed to be of high priority by the various states will be continued even if the Federal funds are terminated. Also, the Sea Grant programs have achieved a high level of scientific and technical competence, which should allow them to compete for funds from such Federal agencies as NSF, DOI, and U.S. Navy as well as from NOAA.

QUESTION:

You propose a cut of more than $30 million for the Information Collection and Analysis section of the Marine Fishery Resource Programs. These decreases will occur in such areas as the monitoring of fisheries stocks and research and monitoring of endangered species. Will these cuts not result in a digression in the progress that we have made in the protection and development of marine resources over the past year?

ANSWER:

No, the proposed cuts will not result in a digression of recent progress in the protection and development of high-priority marine resources under domestic or international management.

QUESTION:

PROFS

Your budget proposes a 50 percent cut in the Program for Regional Observing and Forecasting Services (PROFS). I understand that this program has great potential for use by air traffic controllers. How far back will this $2 million cut set back the development of this technology?

ANSWER:

The proposed reduction relates to a decrease of in-house funded applications research using the PROFS facility. The PROFS mission in demonstrating techniques to integrate diverse data sets has largely been accomplished as evidenced by the initiation of the AWIPS program. The remaining base of $2,000,000 will maintain the PROFS facility and support to the National Weather Service for implementation of the Advanced Weather Interactive Processing System (AWIPS). Other (e.g., non-NOAA) researchers will be able to use the facility for applications research on a reimbursable basis.

At the end of 1986, NOAA will have in place through the PROFS Program:

- a demonstration functional prototype of an AWIPS-type system at the Denver National Weather Service Forecast Office. Named DAR3E (Denver AWIPS Risk Reduction and Requirements Evaluation), this first and very basic system is a major element of the NWS program to evaluate AWIPS requirements and to minimize the risk of designing and implementing the new system;

- a basic capability Mesoscale Analysis and Prediction system which will be capable of collecting and processing experimental data from remote wind and thermodynamic profilers, satellite sounders, and automated aircraft reports into a form useable by mesoscale numerical prediction models;
- a research workstation to support severe thunderstorm and tornado prediction development at the National Severe Storms Laboratory in Norman, Oklahoma.

QUESTION:

Your budget request proposes the elimination of the Fishermen's Contingency Fund. Should an agreement be reached between the Department of Interior and the State of California over the leasing of parts of the outer continental shelf for oil and gas exploration, this fund may become necessary. I therefore find the proposed termination of the fund short-sighted. What is your justification for this decision.

ANSWER:

We have proposed elimination of the Fishermen's Contingency Fund as part of the effort to terminate low priority programs that are not the proper responsibility of the Federal government. Account balances will be returned to the leaseholders. If the need for an indemnity program results from future leasing activity, a state, regional or private sector program would be a more appropriate alternative.

QUESTION:

I support the expeditious development of the NEXRAD system as a means to improve weather forecasting and to improve air traffic safety. I am concerned with the proposed transfer of financing to the FAA Airport and Airway Trust Fund. What were the reasons for this proposal and what is it intended to accomplish?

ANSWER:

The proposal to finance the NWS share of NEXRAD from the FAA Airport and Airway Trust Fund is based on major factors. Aviation will benefit greatly from the data from NEXRAD, the system was designed to meet FAA technical specifications and siting requirements which are the most demanding and NEXRAD data is an integral part of FAA's Advanced Automation System.

Based on those factors, the Administration believes it is appropriate to finance this portion of the NEXRAD program from the FAA Airport and Airway Trust Fund.

Questions for the Record by
Congressman Skeen

QUESTION:

Other countries are now beginning to follow our lead and join the "TOGA" program. Won't our reduced funding for this program be interpreted by the world community as a change in our priorities for this type of work? Could this jeopardize their interest? What research is being given up for the $2 million reduction?

ANSWER:

Many other nations are joining with the United States in support of TOGA. At the present time nine countries are supporting TOGA activities in the Pacific. At least two others are about to join. The proposed reduction of TOGA funds will be accommodated in part through decreased external support to universities and private laboratories. The goal is to replace diminished U.S. activities in TOGA with increased support from other countries because they also benefit from the program.

QUESTION:

What impact will the loss of NOAA funding for deep and shallow submersibles and the NOAA share of ALVIN have on the total use of these vehicles? How will research be impacted?

ANSWER:

NOAA is a 20 percent user of the ALVIN through an interagency agreement (ONR, NSF, & NOAA). NOAA's use of the deep - and shallow-water submersibles is primarily associated with programs in NMFS and OAR. These elements would need to use their program funding in the future to support the costs of the deep- and shallow-water submersibles that are now provided through NURP. The programs would have to judge the necessity for use of submersibles versus other research costs.

QUESTION:

If NOAA drops the funding ($7 million) towards the five regional undersea research programs, can state and private sources replace the funding on a timely basis? Have they been notified of this possibility?

ANSWER:

Both states and private sector organizations have a strong interest in continuing the regional undersea research programs. We believe that they will find resources to continue elements of the program considered a high priority. The proposed termination of Federal support for this program is not new, so while state and private sector interests have not been individually contacted in the recent past, they are aware of the Administration's desire that the principal beneficiaries assume funding responsibility for this program.

QUESTION:

How much private interest has been expressed in the past for studies concerning the recovery of polymetallic sulfides from the seafloor?

ANSWER:

In 1983 Ocean Minerals Company/Lockheed worked with NOAA in a cooperative field investigation of seafloor processes. Facilities and scientific and technical expertise were shared and several active hydrothermal sites where sulfides are being precipitated were discovered.

Since then NOAA's research program on seafloor hydrothermal processes, including the formation of polymetallic sulfides, has maintained close coordination and cooperation with private sector interests in assessing the economic potential of the polymetallic sulfide deposits. However, commercial development of such deposits is unlikely for some time because of the current state of the metals market and present projections of high costs associated with recovery of polymetallic sulfides from the seafloor. The current uncertainty of the international legal situation further complicates the possible exploitation of these deposits, particularly when they lie outside the 200-mile EEZ. The research already conducted by NOAA and others will provide an adequate basis for understanding the processes related to the formation and distribution of polymetallic sulfide deposits.

QUESTION:

A reduction of $844,000 is proposed for Ocean and Great Lakes Prediction Research. The reduction is apparently in research done outside NOAA labs. Where is this research presently being done and what types of research are being eliminated?

ANSWER:

The GLERL research program in Great Lakes Hazards (i.e., projects on surface waves, water level fluctuations, and lake ice) would be eliminated; the Great Lakes Ecosystems Assessment Program would be reduced by eliminating a project on Ecological Succession and Trends. This research provides services to the states surrounding the Great Lakes; those states and the private sector interests which benefit from these studies should assume a greater share of their funding.

QUESTION:

What are the consequences of delaying the completion of the Vertical Network releveling work until 1995? Who will the delay affect?

ANSWER:

Vertical releveling activities will be reduced from 10,000 kilometers per year to 6,000 kilometers per year. In order to complete the vertical datum to be issued in 1995, field activities will have to be completed by 1988-1989. State and local users of geodetic information will be affected in that the final product will be delayed until 1995.

QUESTION:

Will there be any loss in the quality of local weather forecasts due to the closure of the eight Weather Service Forecast Offices? What types of changes will be noticeable by the user public?

ANSWER:

There is no proposal to close eight Weather Service Forecast Offices. The proposal is to reduce the staff at eight Weather Service Forecast Offices and reassign the aviation weather forecasting functions of these offices to other nearby Weather Service Forecast Offices. This should have no effect on the quality of the local public weather forecasts and therefore will go unnoticed by the public.

QUESTION:

What types of technology will be delayed by the reduction of testing at the NOAA Data Buoy Center and what will be the consequences of the delays?

ANSWER:

The technologies which will be delayed by reducing test activities at the National Data Buoy Center are those technologies which have been fully engineered and are ready for operational demonstration. Specifically, these technology improvements include: (1) a data buoy command and control system compatible with the satellite-based data relay system; (2) nearshore ocean wave and weather monitoring system to support the NWS public warning system; and (3) a new generation of electronics equipment which emphasizes both improved reliability and lower cost elements.

Delaying these technology improvements will not affect tthe existing buoy network, and will allow NWS to focus resources on higher priority modernization programs.

QUESTION:

Everyone recognizes the large crop losses that are often avoided by correct, timely agricultural weather forecasts. Some of these specific forecasts are being eliminated. Can the private sector readily provide the quality of service needed to protect these farmers? (The losses are potentially very large compared to the estimated savings!)

ANSWER:

We are confident that agricultural interests will continue to have high quality weather forecasts available to them through private meteorological firms. In fact, agricultural interests will have the opportunity to obtain more detailed, client-specific forecasts and advisories not provided by the National Weather Service.

QUESTION:

Who will assume responsibility for the maintenance of the Colorado River Basin flood warning system? Do they have the resources to do this? What happens in the event proper maintenance does not occur?

ANSWER:

The National Weather Service will assume responsibility for the maintenance of the Colorado River Basin flood warning system. Without operational support and maintenance, the automatic data collection network and computer processing enhancements would eventually deteriorate to a level of inoperability. This would result in a failure to realize the enhanced forecast capabilities.

QUESTION:

The NEXRAD program is proposed at $47.5 million in FY 87 with an additional $286 million between then and 1991. What will be the benefits of the new generation of weather radar to justify the large expenditure of funds?

ANSWER:

The Next Generation Weather Radar (NEXRAD) is an advanced doppler radar system with automated processing capability that will yield many benefits over the current system. Among the more important of NEXRAD's benefits are the following:

- NEXRAD will meet the operational requirements of the Departments of Commerce, Defense, and Transportation for modern and reliable weather radar with critically required severe weather alerting features.
- Warning lead time on damaging tornadoes will be increased from near zero to as much as 20 minutes.
- Severe weather false alarm rates will be sharply reduced (currently near 80%).
- Improved flash flood warnings.
- Improved water resource management that will increase agricultural production and decrease flood damage.
- Improved airport terminal area and en-route aviation safety (40% of aviation accidents are currently weather related).
- Reduced damage to high value property (primarily aircraft) at military airbases and commercial airports from severe storms, high winds and hail.

- Built-in capability to accommodate future data processor and communications growth requirements through simple hardware additions makes the system highly cost effective.
- Reduced logistics support costs.
- Improved data quality and accuracy will sharply increase the quality of service.
- Remote maintenance monitoring and built-in test capability will reduce required maintenance staff levels.

QUESTION:

Explain the importance of the AWIPS-90 and ASOS systems? These systems call for an increase in funding of $16 million in FY 87 and almost $170 million more by 1991.

ANSWER:

Along with NEXRAD and GOES, AWIPS-90 and ASOS are essential technological elements of the modernization of the Nation's weather services. Together these systems establish, for the first time, a firm foundation for observing and interpreting the intense, smaller-scale, short-lived weather phenomena that threaten the lives and property of U.S. citizens.

AWIPS-90 makes it possible for forecasters to assimilate the vastly more detailed and frequent data and information from new observing systems and improved computer-based models, and to provide more timely, accurate and understandable service products for the public and other users.

ASOS will replace routine, manual observing functions of field personnel. It will also remove the necessity for locating service personnel physically at airports where observations are required to support aviation operations. ASOS ensures consistent, uniform observational quality night and day, even at offices staffed only part-time. It also provides nearly continuous data, which is impossible for manual observers.

The introduction of modern technology into weather service operations is consistent with and supportive of the general trends in the way businesses, government and private individuals will operate in the 1990's. The modernization program will make it possible to provide weather services of the quality and in a form that users need and will be able to use.

QUESTION:

Explain the type of research which will be stopped on the "desertification of the arid west" of the Desert Research Institutue in Reno, Nedvada?

ANSWER:

The Desert Research Institute is currently preparing their comprehensive plan for the study of desertification in the arid southwest. The plan is scheduled to be submitted to the National Climate Program in May and will include:

Biological Systems:

1. Biological process: the impact and variation of climate on plants.

Natural Systems:

2. Studies on climate forecasting and assessments: to improve the capability of forecasting annual precipitation and variability.

3. Studies on the processes of forming desert and the spread and means of control: to improve the understanding of how deserts form and receed.

In short, their plan will include research on interaction between climate and natural resources. This plan is in conjunction with four other states in the region and employ such tools as:

1) satellite imagery
2) cloud microphysics
3) gound-based remote sensing
4) mathematical modeling

QUESTION:

Landsat is said to benefit mostly special private interests; should it therefore be funded by those interests? Don't these satellites furnish information to other government agencies also? Please update the success of the commercialization of Landsat thus far.

ANSWER:

The Administrations proposes to discontinue subsidies for Landsat and to transfer full responsibility for this program to the private sector because Landsat principally benefits special interests (e.g., oil companies) and should be funded by those interests rather than by the Government. The marketplace will determine whether additional Landsats will be flown.

Landsat data is used by Government agencies. For example, the U.S. Department of Agriculture uses Landsat data to help forecast foreign and domestic production for selected crops and to assist with damage assessment for U.S. crop insurance purposes. Some other agencies that routinely purchase Landsat data products include the Corps of Engineers, the Agency for International Development, and the U.S. Geological Survey.

The commercialization of the Landsat system as provided for in the Land Remote-Sensing Commercialization Act of 1984 and in the contract with EOSAT is underway.

QUESTION:

What are the consequences of shifting from a "two-polar" to a "one-polar" satellite weather system? How well can we operate in the event of a satellite failure? How long would it take to orbit a replacement?

ANSWER:

The National Weather Service has estimated that a reduction from two satellites to one will cause a small degradation in the skill of forecasts averaged over a season or a year. In such an average, the effect would likely be negligible in the Northern Hemisphere and probably less than 10% in the Southern Hemisphere. There is some risk of reduced observation of phenomena, such as sudden development over the oceans of cyclones into major storms in the winter hemisphere. The impact of such missed forecasts would be felt mainly over the oceans and on the west coast of the United States.

The scientific and civil community users of polar satellite data generally concur in the Weather Service conclusions.

Data quality is the same from one or two satellites; only the quantity of data changes. The one-satellite system provides data of prime importance to the Weather Service to meet its requirements for providing forecasts of conditions expected over the continental areas of the United States. Long-range data are obtained from the one-polar system, though the data are not received as often.

Backup capacity in case a one-polar satellite should fail would be provided partially by data from the Defense Meteorological Satellite Program (DMSP). Though the instruments flown on the DMSP are aimed at meeting the requirements of a different class of user, much of the data are applicable to the civil community. We would also rely more heavily on the quantitative capabilities of the GOES system. Consolidation of these data sets, though of reduced quality when compared to the polar data, would partially meet the requirements for data.

A replacement launch is planned for 120 days after a failure, assuming a satellite and launch opportunity are available.

QUESTION:

In your opinion, is it legal to add weather sensors to the EOSAT contract in mid-stream? Would there have to be a new competition? Who would have control of the data from these sensors? Would the private sector be permitted to market the weather data?

ANSWER:

We are not at liberty to discuss proposals pending review within the Administration.

QUESTION:

Dr. Calio, what are the legal issues raised by the elimination of funding for EOSAT? How can you justify terminating EOSAT's funding when it was this Administration which initiated commercialization of Landsat in the first place?

ANSWER:

We are not aware of any legal issues raised by the elimination of funding for EOSAT.

The Administration proposes to discontinue subsidies for Landsat and to transfer fully responsibility for this program to the private sector because Landsat principally benefits special interests (e.g., oil companies) and should be funded by those interests rather than by the Government. The marketplace will determine whether additional Landsats will be flown.

QUESTION:

What is the impact of eliminating funding for EOSAT on:

-- EOSAT's plans to commercialize the Landsat system?

-- the U.S. remote sensing program?

ANSWER:

EOSAT has not yet indicated whether they will continue Landsat in view of the subsidy termination. The Government already has appropriated $125 million for FY 1985 and FY 1986 ($90 million to EOSAT and $35 million to NASA for launch related costs) to begin design and construction of Landsats 6 and 7 and a commercial ground system.

We do not believe that the termination of Landsat subsidies will necessarily lead to the termination of Landsat. The private sector will not be precluded from maintaining Landsat activities. Data users have access to Landsat data on file. Further, if U.S. aerospace companies determine that these data users constitute a large enough market to make land remote sensing satellites profitable, U.S. aerospace will fly such satellites without subsidy.

QUESTION:

If current circumstances don't change, do you expect NOAA to operate the Landsat system?

ANSWER:

The NOAA FY 1987 Budget Request contains funding to operate the existing Landsat 4 and 5 system. Landat 5 shows every indication of functioning beyond its design life through FY 1987. There are no plans for the Government to construct and operate follow-on land remote sensing satellites after the demise of Landsat 5 except as provided in the EOSAT contract.

QUESTION:

What is the current status of the EOSAT contract?

ANSWER:

The contract (NA-84-DSC-00125) between the Department of Commerce/NOAA and EOSAT was signed on September 27, 1985. Currently, DOC/NOAA and EOSAT are operating under the terms of the contract.

QUESTION:

How much will Omnistar cost?

ANSWER:

The Omnistar modification to the EOSAT contract was implemented on March 18, 1986. The Omnistar modification requires no increase in the original contract price. Under this modification, EOSAT would fly its Landsat instruments on serviceable OMNISTAR platforms rather than on expendable spacecraft.

QUESTION:

If Omnistar turns out to be a good solution to this problem, who will do the research for advanced weather sensors? NASA? NOAA? The private sector?

ANSWER:

The approved modification to the EOSAT contract meets Landsat mission requirements, and does not address NOAA's weather mission.

QUESTION:

Is Omnistar a candidate for ocean-looking sensors as well?

ANSWER:

The Omnistar space-serviceable spacecraft would provide additional payload capability and could carry additional sensors. This could include ocean-looking sensors funded by the private sector.

QUESTION:

Please detail for us the status of the Ocean Color Imager? Are there plans to have the private sector fund this instrument?

ANSWER:

If the private sector determines that an Ocean Color Imager is needed, then private industry should build and pay for the ocean color imager. NOAA would help find a suitable spacecraft to fly it. About three or four firms unofficially have expressed interest in this concept, in which the private sector would fund the instrument and obtain a license from NOAA to operate it. The private operator would then own the data stream for commercial sales, within reasonable constraints defined in the Land Remote-Sensing Commercialization Act of 1984 and draft licensing regulations published in the Federal Register on March 24, 1986.

QUESTION:

What are the issues that would be raised in the international community if the Omnistar proposal were to fly? Please address those issues. Has NOAA discussed this proposal with any of our international partners in space?

ANSWER:

The Omnistar modification to the EOSAT contract was an engineering change proposal which incorporates the Omnistar space-serviceable spacecraft design into the EOSAT contract. There should be no Omnistar issues of concern to the international community. NOAA has notified the Landsat ground station operators, via telex, of the recent contract modification incorporating the Omnistar space-serviceable design.

QUESTION:

How will Omnistar be launched? How will it be serviced? How often? What is the estimated cost of servicing Omnistar? Who will pay those charges? Please compare the cost of servicing the platform with the cost of dedicated, non-serviceable spacecraft, like the current metsats?

ANSWER:

The Omnistar spacecraft will be launched on the shuttle (STS). Omnistar will be a space-serviceable satellite designed to return to the STS parking orbit for rendezvous and replacement, refurbishment, and/or upgrading. Servicing may occur at three-year intervals. NOAA has received estimates from NASA that show that the estimated costs for two launches (one of which could be a service launch) for an Omnistar design would not exceed the $37.9 million for the original DMSP design. The contract with EOSAT provides for the Government to pay for the first two Omnistar launches. Based on estimates received from NASA, there is little difference in either design for launch and servicing costs by Shuttle.

QUESTION:

Under the FY 1987 budget, Landsats 4 and 5 are only funded for half a year. This means that if things continue as they are, we will turn off Landsats 4 and 5 in the middle of the year. How will EOSAT continue its operations with Landsats 4 and 5 turned off?

ANSWER:

The current spacecraft (Landsats 4 & 5) have three-year design lifetimes, so Landsat 5 could fail in mid-FY 1987. However, the assumption in the FY 1987 budget is that the current Government system will be operated at a reduced level, not that Landsat 5 will be operated for half a year. Landsat 5 was launched on March 1, 1984, and shows every indication of functioning beyond its design life.

EOSAT can continue its Landsat 6 and 7 activities after the failure of Landsats 4 and 5, but will face a gap in U.S. Landsat system continuity until Landsat 6 is launched.

QUESTION:

Given the elimination of funding for EOSAT, the lack of full funding for Landsats 4 and 5, and the recent launch of SPOT, France's own government-subsidized remote sensing satellite, what evidence do you have that the United States will not lose its place to the French in the world of remote sensing?

ANSWER:

Terminating Landsat subsidies does not preclude the private sector from maintaining the Landsat program. The U.S. pioneered land remote sensing for 13 years through the Landsat program, producing vast amounts of data which are available to the general public. Because these data primarily benefit specialized user groups such as mineral exploration firms, these private firms, not the taxpayer, should pay for Landsat. That the French have chosen to begin their own subsidized program does not change the Administration's position on Landsat.

QUESTION:

I support the expeditious development of the NEXRAD system as a means to improve weather forecasting and to improve air traffic safety. I am concerned with the proposed transfer of financing to the FAA Airport and Airway Trust Fund. What were the reasons for this proposal and what is it intended to accomplish?

ANSWER:

The proposal to finance the NWS share of NEXRAD from the FAA Airport and Airway Trust Fund is based on three major factors. Aviation will benefit greatly from the data from NEXRAD, the system was designed to meet FAA technical specifications and siting requirements which are the most demanding and NEXRAD data is an integral part of FAA's Advanced Automation System.

Based on those factors, the Administration believes it is appropriate to finance this portion of the NEXRAD program from the FAA Airport and Airway Trust Fund.

DEPARTMENT OF COMMERCE

General Administration

Salaries and Expenses

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts

(dollars in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
1	$39,250	$32,300	-$6,950	-18%
2	39,250	30,900	-8,350	-21%
3	39,250	28,304	-10,946	-28%

EFFECTS

- All alternatives listed are derivatives of our 1986 appropriation and not our Obligational Authority. Congress appropriated only $32.3 million in 1986 in recognition of the $3.7 million in one-time prior year funds that were available to the account. It was Congress' intent that funding authority of $36 million be available to the S&E account through the combination of a new appropriated amount of $32.3 million and the previously appropriated funds of $3.7 million.
- For each of the alternatives, almost all travel would be curtailed; RIFs or furloughs would be necessary; training, maintenance contracts on office equipment, and most supplies would be eliminated; and lapse rates would be increased.
- Other steps would have to be considered such as delaying implementation of the Financial and Management Information System (FMIS) by 1 to 2 years and not expanding IG audits of ADP systems.

DEPARTMENT OF COMMERCE

Bureau of the Census

Salaries and Expenses

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
1	$91,675	$90,400	-$1,275	-1.4
2	91,675	86,513	-5,162	-5.6
3	91,675	79,246	-12,429	-13.6

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- The FY 1987 requested initiatives for services industries or foreign trade statistics may not be carried out. Delays in release or loss of data in base survey work may also occur.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- Reductions in positions through RIF's could occur under this alternative.
- Same as Alternative #1, except that further reductions in survey work may reduce some samples below reliable levels. Less statistical information may be available to businesses and government.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- Further reductions in positions through RIF's could occur.
- Same as Alternatives #1 and #2, except that Census would primarily provide economic and demographic information needed for Federal decision-making. Less information may be available to business, state and local governments and individuals.

DEPARTMENT OF COMMERCE

Bureau of the Census

Periodic Censuses and Programs

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
1	$185,555	$105,600	-$79,955	-43.1
2	185,555	101,058	-84,497	-45.5
3	185,555	92,569	-92,986	-50.1

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- Positions may be reduced through a combination of RIF and cancelled hiring plans.
- This alternative may not provide the planned increases requested in the President's FY 1987 budget to begin final preparations for the 1990 Census and to conduct final planning and preparation for the 1987 Economic Census, Census of Agriculture, and Census of Governments.
- The Census Bureau's ability to conduct the 1990 Census could be adversely affected. The 1987 Economic Censuses, the 1987 Census of Agriculture, 1987 Census of Governments, and the intercensal demographic statistics and sample redesign programs could be delayed or cancelled. Statistical information, both economic and demographic, including monthly, quarterly, and annual statistics on the Nation's economy and people could be reduced.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- Same as Alternative #1, except that 1990 Census preparatory activities may be further reduced.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- Same as Alternatives #1 and #2, with possible further reduction of 1990 Census product development and statistical research activities.

DEPARTMENT OF COMMERCE

Economic and Statistical Analysis

Salaries and Expenses

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference Amount	Difference %
1	$31,005	$30,500	-$505	-1.6
2	31,005	29,188	-1,817	-5.9
3	31,005	26,736	-4,269	-13.8

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- This reduction could be achieved through hiring restrictions and spending constraints on travel, printing, training, data purchases and computer services.
- This alternative may not provide funds for the proposed increase of $750 thousand to provide needed improvements in corporate tax return data used to prepare the GNP estimates. The quality of our GNP estimates may be impaired.
- This alternative assumes acceptance of the proposal in the President's FY 1987 budget to eliminate the Productivity, Technology, and Innovation (PTI) programs.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- Reduction of positions through RIF or furlough may occur.
- Same as Alternative #1, except that there may be further limits on hiring and other object class spending and adverse affects on programs which may include ESA's direct investment surveys; information on the capital expenditures by majority-owned foreign affiliates of U.S. companies; the annual updates of the benchmark input-output table and the quinquennial employee compensation table; and the monthly publication Business Conditions Digest. Reduction in policy support on major economic issues may also occur.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- Further reduction of positions would occur.
- Same as Alternatives #1 and #2, with further reductions in the compilation and publication of economic data. Affected programs may include ESA's county personal income data; the survey of newly established or acquired affiliates of foreign companies in the U.S.; GNP estimates by industry and national income by sector in constant dollars; the quarterly state personal income series; the new benchmark survey of unaffiliated series transactions; and quarterly GNP estimates.

DEPARTMENT OF COMMERCE

Economic Development Administration

Economic Development Assistance Programs

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts

(dollars in thousands)

Alternative	1987 President's BA Request[1]	House Assumed Allowance	Difference	
			Amount	%
Salaries & Expenses				
1	$21,591	$26,000	+$4,409	+20
2	21,591	24,882	+3,291	+15
3	21,591	22,792	+1,201	+6
Economic Development Assistance Programs				
1	...	175,000	+175,000	...
2	...	167,475	+167,475	...
3	...	153,407	+153,407	...

Effects

The funding for each of the three alternatives exceeds the President's request and would have no adverse programmatic consequences. This would increase the budget deficit.

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[1] The President is requesting budget authority of $21,591,000 through a reappropriation of FY86 funds proposed for deferral. Therefore no new appropriation is necessary for FY87.

DEPARTMENT OF COMMERCE

International Trade Administration

Operations and Administration

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference Amount	Difference %
1	$179,170	$192,000	+$12,830	+7
2	179,170	183,744	+4,574	+3
3	179,170	168,310	-10,860	-6

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- The amount provided is greater than the President's Request. There would be no adverse programmatic consequences, but this will add to the budget deficit.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- Same as Alternative #1.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- The result of reducing positions primarily from trade promotion could reduce overseas trade leads, reduce U.S.-organized overseas trade events, and reduce business firms exporting for the first time. This translates into fewer opportunities for U.S. firms in overseas markets, and similarly helps foreign competitors become established as reliable suppliers. ITA could close overseas posts, district offices in the U.S. and branch offices. The closings would be based on trade activity and potential at those locations.

- Similarly, U.S. industry sector analyses and competitive assessments could be reduced providing a weakened informational base from which U.S. trade policies are derived. The seven sector organizations could also be reduced. This could lead to a lower number of major project leads.

- A position reduction in Trade Administration could impact the AD/CVD annual review process, diluting current efforts to reduce the backlog. In addition, some enforcement initiatives may be curtailed. The impact of these changes is to diminish the effectiveness of one of the few remedies to unfair trade, and the mechanism that prevents the illegal export of U.S. technology.

DEPARTMENT OF COMMERCE

Minority Business Development Agency

Minority Business Development

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
1	$45,369	$45,000	-$369	-1
2	45,369	43,065	-2,304	-5
3	45,369	39,448	-5,921	-13

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- The impact of this alternative would be minimal on program and program management activities.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- Activities that directly support program operations could be severely curtailed. Program improvements initiated in FY 1986 may be abandoned.

- Information systems data such as Commerce Business Daily may not be made available to Minority Business Development Centers (MBDC's) for use by minority businesses. The private/public partnership program could be discontinued. Some MBDC's could be eliminated and sites could be serviced by a circuit rider. A number of State and local government offices could be closed. Outreach activities and information dissemination could be severely curtailed. The Agency's ability to respond to requests for information could be hampered.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- Under this alternative some program components may be curtailed. This could cause a loss in the program balance between direct and indirect management and technical assistance to the minority business community.

DEPARTMENT OF COMMERCE

United States Travel and Tourism Administration

Salaries and Expenses

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
1	$4,023	$12,000	+$7,977	+198.3
2	4,023	11,484	+7,461	+185.5
3	4,023	10,519	+6,496	+161.5

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- o The amount provided is greater than the President's Request. There would be no adverse programmatic consequences, but this will add to the budget deficit.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- o Same as Alternative #1.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- o Same as Alternative #1.

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Operations, Research, and Facilities

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts

(dollars in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference Amount	Difference %
1	$836,479	$1,136,699	+$300,220	+35.9
2	836,479	1,087,821	+251,342	+30.0
3	836,479	996,444	+159,965	+19.1

Effects

Alternative #1 -- 1987 appropriation equals the 1986 appropriation.

- The amount provided would be greater than the President's request. There would be no adverse consequences, but would increase the budget deficit.

Alternative #2 -- 1987 appropriations equals the 1986 appropriation less Gramm-Rudman-Hollings cuts.

- The amount provided would be greater than the President's request. There would be no adverse consequences, but would increase the budget deficit.

Alternative #3 -- 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts.

- The amount provided would be greater than the President's request. There would be no adverse programmatic consequences, but would increase the budget deficit.

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Other NOAA Accounts

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts

(dollars in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
Fishermen's Contingency Fund				
1	...	$750	+$750	+100
2	...	718	+718	+100
3	...	658	+658	+100
Foreign Fishing Observer Fund				
1	$2,000	4,500	+2,500	+125
2	2,000	4,306	+2,306	+115
3	2,000	3,944	+1,944	+97
Fishermer's Guaranty Fund				
1	1,800	3,000	+1,200	+67
2	1,800	2,871	+1,071	+60
3	1,800	2,630	+830	+46
Promote and Develop Fishery Products				
1	...	8,007	+8,007	+100
2	...	7,663	+7,663	+100
3	...	7,019	+7,019	+100

Effects

Alternative #1 -- 1987 appropriation equals the 1986 appropriation.

- For all the above accounts, the amount provided would be greater than the President's request. There would be no adverse programmatic consequences, but would increase the budget deficit.

Alternative #2 -- 1987 appropriations equals the 1986 appropriation less Gramm-Rudman-Hollings cuts.

- For all the above accounts, the amount provided would be greater than the President's request. There would be no adverse consequences, but would increase the budget deficit.

Alternative #3 -- 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts.

- For all the above accounts, the amount provided would be greater than the President's request. There would be no adverse consequences, but would increase the budget deficit.

DEPARTMENT OF COMMERCE

Patent and Trademark Office

Salaries and Expenses

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference Amount	Difference %
1	$243,444	$220,179	-$23,265	-9.6
2	243,444	211,399	-32,045	-13.2
3	243,444	193,641	-49,803	-20.5

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- This proposal could result in a reduction of some positions by not filling existing vacancies and eliminating hires approved for FY 1987. Some furloughs also may be necessary.
- Patent pendency may increase each year, rather than decrease. Trademark registration pendency may increase, and backlog at the Trademark Trial and Appeal Board (TTAB) may rise.
- In Automation, this proposal may cause a cutback in the Group 220 testbed activity. Because a completed evaluation of the testbed may be delayed, deployment of the quality electronic searching enhancements to the rest of the Examining Corps would slip a comparable length of time. Such delays would have an impact on examination quality.
- Assistance to the public in making searches in the Public Search Rooms may have to be curtailed. In-house training, EEO programs, building maintenance, transportation services, equipment repair services and classification studies may be reduced.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- This alternative may necessitate a further reduction of positions and additional furloughs.
- Patent Pendency may increase more rapidly. Reductions in reclassification, foreign translations, and commercial databases may reduce the currency and scope of the search database and, therefore, patent quality. Trademark pendency also may increase.

- PTO may have to significantly scale back its Automation development in order to maintain current operational systems such as PALM and TRAM and to continue small-scale refinements to the Automated Trademark System.
- Assistance available in the Public Search Rooms may have to be limited.
- PTO may have difficulty meeting the processing requirements of the International Patent Cooperation Treaty.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- Further reductions in positions may be necessary under this alternative.
- Patent and Trademark pendency may further increase. Little if any funds may be available for quality examination, i.e., commercial databases, books, training and examiner site visits.
- Significant scale backs in development of automated trademark and patent systems may be required to maintain current operational systems.
- Operating hours of the Public Search Rooms may be reduced.
- PTO could have difficulty meeting the processing requirements of the International Patent Cooperation Treaty.

DEPARTMENT OF COMMERCE

National Bureau of Standards

Scientific and Technical Research and Services

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference Amount	Difference %
1	$123,953	$123,985	+$32	...
2	123,953	118,654	-5,299	-4.3
3	123,953	108,687	-15,266	-12.3

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- This amount is greater than the President's Request. There would be no adverse programmatic consequences, but this will add to the budget deficit.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- NBS employment may have to be reduced from the President's FY 1987 Budget.
- Program initiatives in Fiber-Optics, Advanced Ceramics, and Scientific Computing Support may have to be curtailed.
- Savings may have to be made through delays in hiring, reductions in travel and laboratory supplies, and cutbacks in other other objects spending.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- NBS employment may have to be reduced from the President's FY 1987 Budget.
- Program initiatives in Fiber-Optics, Advanced Ceramics, and Scientific Computing Support may not be implemented. Construction of the Cold Neutron Research Facility may again be delayed.
- Additional savings may have to be made similar to those under Alternative #2.

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Salaries and Expenses

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
1	$13,916	$13,400	-$516	-3.7
2	13,916	12,824	-1,092	-7.8
3	13,916	11,747	-2,169	-15.6

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

- NTIA employment may have to be reduced from the President's FY 1987 Budget. This could be accomplished principally through normal attrition.
- The $500,000 International Policies initiative may be eliminated due to insufficient funding.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

- NTIA employment may have to be reduced from the President's FY 1987 Budget. This could be accomplished through normal attrition and, possibly, reductions-in-force.
- The $500,000 International Policies initiative may not be implemented resulting in decreases in this area.
- Reductions, largely personnel, in NTIA's other activities -- domestic and federal telecommunications, spectrum management, and telecommunications science research -- may have to be made. This is because NTIA's other objects spending is limited and could not be reduced quickly enough in order to achieve the spending reductions required under this budget scenario.

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

- NTIA employment may have to be reduced from the President's FY 1987 Budget. This would be accomplished principally by reductions-in-force.

- The International Policies initiative may not be implemented due to insufficient funding.

- NTIA's international activities may be reduced to below their FY 1983 level.

- Spectrum management activities, including some involving the Frequency Assignment Process, domestic telecommunications policy development, and telecommunications sciences research may have to be reduced.

DEPARTMENT OF COMMERCE

National Telecommunications and Information Administration

Public Telecommunications Facilities, Planning and Construction

Effects of Alternative FY 1987 Gramm-Rudman-Hollings Budget Cuts
(dollar amounts in thousands)

Alternative	1987 President's Request	House Assumed Allowance	Difference	
			Amount	%
1	...	$24,000	+$24,000	...
2	...	22,968	+22,968	...
3	...	21,039	+21,039	...

Effects

Alternative #1 - 1987 appropriation equals the 1986 appropriation

o This amount is greater than the President's Request. There would be no adverse programmatic consequences, but this will add to the budget deficit.

Alternative #2 - 1987 appropriation equals the 1986 appropriation less Gramm-Rudman-Hollings cuts

o Same as Alternative #1

Alternative #3 - 1987 appropriation equals 8.4 percent less than the 1986 appropriation after Gramm-Rudman-Hollings cuts

o Same as Alternative #1.

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